

### Change Table:

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Date of Change	Related Issue/Incident Number	Updated by	Revision
2/25/00	128, 101	F. Ernst	Update Application Overview, Reference Codes, Extraction File Layout, Exception File Layout, the Developer's Notes, and WDTIP Contact sections of the document to reflect changes made during the Code and Unit Test and System Test phases of the project
4/5/00	151	A. Leano	Add note to EDG that states explicitly the records in the extraction file must be a fixed length of 150 bytes. Attach the COBOL file layout for reference.
4/20/00	151	A. Leano	Add clarification to the EDG on the use of the Federal/State Only Flag in the Program Participation Transaction section of the Extraction File Layout.
4/20/00	151	A. Leano	Add note to EDG which explicitly states that WDTIP expects to receive one extract file per county per day.
4/20/00	151	A. Leano	Add note to EDG which explicitly states that batch version number starts at 0 (zero).
02/24/01		R. Frey	Add section to EDG for new transaction (LD01).
9/16/02	Inc #417 Inc #853 Issue #164	L. Holder	Add the following: Incident #417, Extenders; Incident #853, Vista Volunteer Exception Code; and Miscellaneous changes
12/20/02	803	K. Murdock	Add information regarding the new 48/53-60 Approaching Clocks Report.
6/15/03	Issue 231 Incident 876	K. Murdock	Add information regarding the new Repay Codes, 07/700 and 07/701.
09/02/03	Incident 909	K. Murdock	Added information on Tribal TANF information
01/12/04	Incident 930	G. Kajita/ L. Holder	Modified Extract File Layout for Diversion Transactions and Exception Processing Reason Code 208.
05/10/04	Incident 803	K. Murdock/ L. Holder/ G. Kajita	Updated the TRAC Reference Code, Transaction Navigation Code Information. Updated the table to reflect new Approaching Clocks Report.
05/10/04	Incident 830	K. Murdock/ L. Holder/ G. Kajita	Updated the TRAC Reference Code Note for Program Exception Reason Type Code. Provided information on program exception types of 02 and 05.
05/10/04	Incident 878	K. Murdock/ L. Holder/ G. Kajita	Corrected Extraction File Layout to correctly identify when an aid code is a mandatory field. Extraction File Overview Section made more consistent by renaming File Header to Batch Header and Trailer Record to Batch Trailer Record as identified in the Extraction File Layout. (Pages 40, 41, 81, 82)
05/10/04	Incident 921	K. Murdock/ L. Holder/	Updated TRAC Reference Codes, Program Participation Type Code Effective 10/01/1999 for Aid Code 04/33, Aid
05/10/04	Incident 932	G. Kajita K. Murdock/ L. Holder/	Code 04/3H (F), Aid Code 04/3H(S).  Updated TRAC Reference Codes, Program Participation Type Code Effective 01/01/2004 for Aid Codes 32 and 3W.



Date of Change	Related Issue/Incident Number	<b>Updated by</b>	Revision
		G. Kajita	
05/10/04	Incident 940	K. Murdock/ L. Holder/ G. Kajita	Corrected Extraction File Layout for Federal/State Only Indicator and Program Discontinuance Reason Code from Mandatory to Mandatory/Optional. Updated Rule Information.
09/30/04	Incident 917	K. Murdock/ L. Holder/ G. Kajita	Updated the TRAC Reference Codes - County Code table for Los Angeles.
09/30/04		K. Murdock/ L. Holder/ G. Kajita	Added information on overlapping program participation, page 51.
09/30/04	Help Inquiry 725	K. Murdock/ G. Kajita	Added to footnote to extenders. Extenders do not stop the TANF and WTW clocks.
09/30/04	Incident 916	K. Murdock/ G. Kajita	Updated the County Info Table for Merced. Merced converted to C-IV.
09/30/04	Incident 916	K. Murdock/ G. Kajita	Removed Reference to Exception Processing Message 282.
09/30/04	Incident 953	K. Murdock/ G. Kajita	Added Program Discontinuance Reason Code 083 per ACL 04-08. Added American Territories to the State Code Table. Corrected the error text for error code UPX1230.
11/30/04	Incident 954	K. Murdock/ G. Kajita	Added TRAC Reference Codes, Program Participation Type Code Effective 12/01/2004
02/15/05	Incident 916	K. Murdock/ G. Kajita	Updated County Information for Riverside and San Bernardino Counties. Counties converted to C-IV.
06/10/05	Incident 770 Incident 954	G. Kajita	Updated County Information for Placer, Sacramento Santa Clara, Santa Cruz, and Yolo Counties. These counties have converted to CalWIN. Updated the Extract File Layout for LD03 transactions. Updated WDTIP Technical Contacts.
07/12/05	Incident 770 Incident 954	G. Kajita	Updated the description for the work plan sign date in the Extract File Layout, Attachment A. Updated County Information for Solano County. Solano County has converted to CalWIN. Updated WDTIP contacts e-mail address.
10/31/05	Incident 770 Incident 805, Incident 947 Incident 973	G. Kajita	Updated the TRAC Reference Codes, County Information for Contra Costa and Stanislaus Counties. Contra Costa has converted to CalWIN and Stanislaus has converted to C-IV. Updated TRAC Reference Codes Program Exception Reason Code Descriptions (for 02/200, 02/201, and 02/202) and new Exception Processing Messages 296 to 305. Added information on new exceeding clock report. Removed reference to the original Approaching Clocks Report as none of the counties are receiving this report; renamed Attachment C.1 to Attachment C.



			SERVING CALIFORNIA
Date of Change	Related Issue/Incident Number	Updated by	Revision
12/31/05	770, 947, 938	G. Kajita	Modified the Exceeding Clock with Aid Code Report File description. This report has been modified to exclude clients who exceeded the TANF clock and are on either aid code 32 or 3W for the report month.  Updated the TRAC Reference Codes County Table for Alameda County. Alameda County has converted to CalWIN. Updated the UCSR; all counties now have update capability on the Child Support Reimbursement Update (UCSR) screen.
3/15/06	770, 805, 957	G. Chen	Added description for new Active Program Participation Report under "Reports" and "Reports and Reports File Overview" sections.  Added new section - Attachment I.
			<ul> <li>Updated TRAC Reference Codes manual: <ul> <li>"County Code" table for Orange, San Meteo, Santa Barbara and Tulare counties.</li> <li>"Error Messages Code" table to include new online error messages DIV1010, UPX1390 to UPX1460.</li> <li>"Program Exception Reason Type Code" table to remove * from exception code "02" and add to reason code 200 to 205.</li> <li>"Transaction Navigation Code" table to include RP07.</li> </ul> </li> </ul>
7/2006		G. Chen	Modified the "Business Logic" section under Program Participation and Program Exceptions: The program Effective month is no longer mandatory for Fresno county.  Update WDTIP Technical Contacts.
			Updated Attachment A – Effective month in LD02 and LD09 transaction is optional for all counties.
			Updated TRAC Reference Codes Manual:
			<ul> <li>Exception Processing Reason Code table:         message 128, 129, 130, 146, 147 and 148</li> <li>Program Exception Reason Type Code table: rephrase "please note" section.</li> <li>Program Type Code table: add comment for type</li> </ul>



Date of Change	Related Issue/Incident Number	Updated by	Revision
			code "02"  o Tribal TANF Codes table



# WELFARE DATA TRACKING IMPLEMENTATION PROJECT

### EXTERNAL DEVELOPER'S GUIDE



### **Table of Contents**

1.	INTRODUCTION	8
	BACKGROUND	8
	SCOPE	
	ORGANIZATION OF THIS DOCUMENT	
2.	DEFINITIONS AND ACRONYMS	10
3.	CONVERSION STRATEGY	15
	CURRENT APPLICATION- PRE-SAWS	15
	TRAC	17
	CONVERSION OPTIONS	19
4.	APPLICATION OVERVIEW	21
	APPLICATION COMPONENTS	21
	Infrastructure Overview	
	DATABASE RESTRUCTURING	
	INITIAL/ONGOING LOADS	
	STATE DATA SOURCES	
	COMMON LOGIC PROGRAMS	
	REPORTS	
5 1	DEVELOPER NOTES	
J. 1		
	EXTRACTION FILE OVERVIEW	
	Transmission Protocols	
	REPORTS AND REPORTS FILE OVERVIEW	
6.	DEVELOPMENT PROCESS	
υ.		
	REVIEW OF SOURCE SYSTEM DATA	
	TRIAL LOADS	
	Initial Conversion	
	ONGOING LOADS (AFTER INITIAL CONVERSION)	
7.	WDTIP TECHNICAL CONTACTS	
8.	ISSUES AND ASSUMPTIONS	
	ASSUMPTIONS	
A 7T		
ΑΊ	TACHMENT A – EXTRACTION FILE LAYOUT	109
AT	TACHMENT B – EXCEPTION FILE LAYOUT	110
ΑT	TACHMENT C – REPORT LAYOUT 48/53-60 APPROACHING CLOCKS	111
ΑT	TACHMENT D - REPORT LAYOUT EXCEEDING CLOCKS	112
ΑT	TACHMENT D.1 – REPORT LAYOUT EXCEEDING CLOCKS WITH AID CODE	113



ATTACHMENT E – REPORT LAYOUT MULTIPLE COUNTY AID	114
ATTACHMENT F – REPORT LAYOUT MONTHLY PROJECTIONS	115
ATTACHMENT G – TRAC DATA MODEL	116
ATTACHMENT H – TRAC DATA DICTIONARY	117
ATTACHMENT I – REPORT LAYOUT ACTIVE PROGRAM PARTICIPATION	117
APPENDIX 1 – TRAC REFERENCE CODES	119
Figure 1: Current Application	16
Figure 2: TRAC Application	
Figure 3: Application Components	23
Figure 4: Infrastructure Overview - TRAC Application	
Figure 5: DB2 Database Change Process	
Figure 6: DB2 Data Conversion	
Figure 7: County Job Flow: Job ID B3DDL01	
Figure 8: SCI Job Flow: Job ID B3DDL03	
Figure 9: MEDS Job Flow: Job ID B3DDL02	
Figure 10: Time Calculation Job Flow: Job ID B3DDL02	
Figure 11: Agent Data Retrieval	
Figure 12: Screen Program Flow	
Figure 13: Monthly Reports Job Flow:	
Figure 14: County to TRAC File Transfer	



### Introduction

The **External Developer's Guide** provides application developers reference materials for creating programs that will generate the batch extraction file through which counties will update the Tracking Recipients Across California (TRAC) application data. Additionally, this document will provide an overview of the transmission protocols through which all files will be sent, the methods used to load that data, and the process through which rejected data will be returned to the counties. Finally, this document includes a description of the TRAC Application reports.

### **Background**

In response to the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996, the State of California passed Assembly Bill (AB) 1542. AB 1542 institutes the Temporary Assistance to Needy Families (TANF) program in California and impose welfare time limits, as well as new programmatic and eligibility rules. In addition to welfare time limits, AB 1542 mandates work requirements through the CalWORKs program. As a result of the CalWORKs program, county welfare departments are required to have a mechanism to track eligibility time limits, and other related data on an individual level, across counties, and over time to comply with the tracking requirements of both State and federal mandates.

The purpose of the TRAC Application is, therefore, to provide a communication mechanism and central data repository that can be accessed by all technology-enabled counties and relevant agency systems in order to prevent welfare fraud and meet the requirements of Statewide Automated Welfare System (SAWS) legislation and the TANF and CalWORKs programs. It addresses the immediate need for federal and State Welfare Reform tracking requirements imposed by the Federal PRWORA, AB 1542 and relevant All County Letters issued by the California Department of Social Services (CDSS).

### Scope

The **External Developer's Guide** document is limited to presenting an explanation of how the TRAC Application will work. Through the document, special attention is paid to the systems with which the TRAC Application will interface so the readers of this document can understand how to develop the programs that will interface with it. The intended readers of this document are business application developers external to the WDTIP project that are responsible for developing programs and files that interface with the TRAC Application.



### Organization of this Document

This document covers a wide variety of topics that readers will need to understand to successfully develop programs that will interface with the TRAC Application. This section describes the main components that make up the **External Developer's Guide**.

Each component is composed of many other subsections. The following is a high level description of the components that make up this document.

- □ **Definitions and Acronyms**: contains a list of definitions and acronyms to provide a clear definition of terms used throughout the body of the document.
- □ Conversion Strategy: contrasts the design of the current application versus the TRAC Application. It explains how data flows into the TRAC Application and describes the different conversion strategies that will be used to load the initial data into the application.
- □ **Application Overview**: describes how the programs within the application interact with one another and external systems. It describes the inputs and outputs of each program and the program's objective.
- □ **Developer Notes**: contains the bulk of the information that external developers need to know to develop the programs that will interface with the TRAC Application. The following are the main components of this section:
  - 1. *Extraction File Overview*: includes descriptions and scenarios for each component of the Extraction File.
  - 2. *Transmission Protocols*: explains the protocols that are used between the county systems and the TRAC Application to send and receive data, such as the extraction file and exception reports.
  - 3. *Exception File Overview:* includes description and scenarios for each component of the Exception File.
  - 4. *Reports Overview*: explains the reports that are generated from the TRAC Application.
- □ **Development Process**: explains the process to develop, test, and integrate the programs that will perform the system conversion and data loads into the TRAC Application.
- □ **WDTIP Technical Contacts**: contains contact information for the WDTIP Team members that can offer technical support to the counties during their development and conversion efforts.
- □ **Issues and Assumptions**: contains assumptions recorded during the design phase of the TRAC Application.
- □ Attachments and Appendix: contains reference material that will be helpful to better understand the TRAC Application and the programs that will be necessary to interface with it. Examples include file layouts, the TRAC Application data model, and TRAC Reference Codes.



### 1. Definitions and Acronyms

Below is a selected list of definitions and acronyms of terms used throughout the document.

- < Less Than
- <> Not Equal to
- = Equal to
- <= Less Than or Equal to
- > Greater Than
- >= Greater Than or Equal to

**3270 & 3270 Emulation** – A communication protocol between workstations and the HHSDC. An established communication link is referred to as a "session". 3270 sessions connect dedicated terminals to the HHSDC. 3270 emulation is software driven session used to connect a workstation to the data center with a functionally equivalent interface.

**Agent Subroutines** – Programs responsible for retrieving data from database tables and manipulating/formatting data as needed before displaying it on the screens.

**Architecture** – The manner or structure in which hardware or software is constructed. It defines how a system or program is structured, how various components and parts interact, as well as what protocols and interfaces are used for communication and cooperation between modules and components which make up the system.

**Backup** – A process of creating a copy of a configuration item to prevent the loss of work.

**Batch** – Application programs that process on a predetermined schedule. In TRAC, all batch processing will be "background" processing.

**BMS** – Basic map support. A CICS facility for mapping the physical layout of a screen.

**CICS** – Customer Information Control System. An IBM system for online transaction processing.

CIN - Client Index Number.

**COMMAREA** – COMMunication AREA (COMMAREA) is used in online programs to pass data between programs.

**Common Logic Subroutines** – Programs responsible for processing functions used by multiple programs other than retrieving data from the database (i.e., error processing, screen help).

**COPYBOOK** – Contains either common logic (e.g., date validation) or common structure of working storage variables.

**DASD** – Direct Access Storage Devices (DASD) attached as peripheral devices to the mainframe computer.



**Database** – A collection of interrelated data stored together in one or more computerized files.

**DB2** – Database 2 (DB/2) is a relational database product from IBM. It operates in a mainframe environment with communication capability to many programming languages and to other database products operating in the same or other environments.

**DB2 Subsystem** – A single copy of DB2 running on the mainframe computer. Each subsystem has unique associated resources such as buffer pools and system catalogs.

**DB2 Table** – A logical entity internal to DB2 that defines the structure of a named collection of data attributes. Tables often correlate closely to the entities and attributes defined in the logical data model. Tables utilize the storage space defined in tablespaces and are contained entirely within them.

**DB2 Tablespace** – A logical entity internal to DB2 that represents defined physical storage within a database.

**DCLGEN** – DeCLarations GENerator (DCLGEN) is a program that creates embedded SQL DECLARE TABLE statements and corresponding COBOL structure declarations from table descriptions in the catalog.

**Declare Cursor** – SQL command used to retrieve more than one row of data from a database table.

**DSNTIAR** – Subroutine used to convert a SQL return code into a text message. DSNTIAR takes data from the SQLCA (SQL Communication Area), formats it into a message, and places the result in a message output area that is provided in the application program.

**EXIT** – Terminate a process.

**Function** – A defined objective or characteristic action of a system or component. For example, a system may have inventory control as its primary function.

**Gigabyte** – 1,073,741,824 bytes. A byte is a series of bits of a particular length, usually 8. Computer storage space is measured in bytes.

**HHSDC** – The Health and Human Services Data Center (HHSDC) is the location of the mainframe computers and the associated peripheral devices that support the proposed TRAC application.

**Internal Reader -** The internal reader (INTRDR) function accepts JES3 output data as an input job stream. Any job can use the internal reader to pass a job stream to JES3. The internal reader allows jobs submitted from MVS/TSO/E SUBMIT command and jobs created as system output (SYSOUT=(class,INTRDR)) to be submitted to JES3 input service for processing. JES3 dynamically starts internal readers as needed.

**Invoke** – Initiate a program.

**ISPF** – Interactive System Productivity Facility. Full screen editor and dialogue manager.

JCL – Job Control Language. Commands used to control jobs and programs on IBM



mainframe operating systems.

**JES** – The Job Entry System is a function within the operating system of mainframe computers that facilitates the execution of tasks, called JOBs, on the computer. These are multiple versions of JES: JES2 and JES3. JES3 is in use at the HHSDC.

**JOIN** – SQL command used when accessing data from multiple tables in a database.

**LINK** – Connects programs with the capability of returning control to the initiating program.

**LINKAGE SECTION** – Used to pass data between programs.

**Mainframe** – A computer or system of computers designed for the uninterrupted processing of data. Mainframe computers are designed to support the requirements of multiple users, or groups of users. The processing capacity of mainframe systems varies within broad parameters. Special environmental and security concerns often limit the physical placement of these systems.

**May** – Indicates an item or activity appropriate under some, but not all, conditions; for which there are a number of acceptable alternatives; or for which there is no professional consensus.

**Map** – The screen layout.

**MOVE** – Populate values into the data element/table column.

MVS – Short for Multiple Virtual Storage (MVS), the operating system for older IBM mainframes. MVS was first introduced in 1974 and continues to be used, though it has been largely superseded by IBM's newer operating system, OS/390.

**Online** – Application programs that run in the CICS environment. In TRAC, all online processing is "real time" processing.

OS/390 – An IBM mainframe operating system, featuring integrated MVS, UNIX, LAN, distributed computing and application enablement services through its base elements. These base services enable open, distributed processing and offer a foundation for object-ready application development. The OS/390 base includes a Communication Server that includes VTAM, the VTAM AnyNet feature, TCP/IP and TIOC. It provides SNA (3270), APPC, High Performance Routing, ATM support, sockets and RPC.

**Passing** – Moving values between application programs.

**Peripheral Devices** – Computing equipment connected by direct communication channels to a mainframe computer. Peripheral devices include disk drives, tape drives and printers.

**Populate** – Loading values in data fields.

**READ** – SQL command used to select column values from database tables or a program command used to read a file.

**RECEIVE** – In online screens, the Map is thrown from the screen to the CPU.

**Referential Integrity** – A set of relationships specifying a dependency between



attributes in the data model. Referential Integrity rules can define parent – child relationships or require existence testing prior to an update operation. They can be defined within the database code or within the application logic that interfaces with the database.

**RETRIEVE** – Collect data from a database table or TSQ or COMMAREA.

**SEND** – In online screens, the Map is thrown from the CPU to the screen.

**Shall** – Indicates an item or activity is required.

**Should** – Indicates an item or activity is recommended.

**SIS** – SAWS Information System. The database currently being utilized by the Pre-SAWS application.

**Spaces** – Indicates when the alphanumeric field is empty.

**SQL** – Structured Query Language (SQL) is the programming language used to access data stored in DB2 databases.

**SQL CODE 0** – Query was successful.

**SQL CODE 100** – Row not found (i.e., no data found).

**Stacked** – Collect data and store in the TSQ.

**TCP/IP** –Transmission Control Protocol/Internet Protocol (TCP/IP) is the basic communication language or protocol of the Internet. It can also be used as a communications protocol in the private networks called intranets and extranets.

**TRAC** – Tracking Recipients Across California.

**TRAC Database** – The database that will be created for the TRAC Application.

**TRAC System** – Refers to all components involved in TRAC.

**TRAN-ID** – 4-character transaction id, used in online programs to initiate screen access.

**TSQ** – Temporary Storage Queue, used to store bulk data.

**VTAM** – Virtual Telecommunications Access Method (VTAM) is the primary communication protocol between the HHSDC mainframe and terminals connected as either 3270 or 3270 emulation sessions.

Welfare Data Tracking Implementation Project (WDTIP) – The official name of the project that is the subject of this document.

**WHERE** – SQL command used for specifying a conditional query on the database.

**Will** – Indicates an item or activity is a goal, which may or may not be attainable. See Shall.

**WRITE** – Same as MOVE verb, but in programming semantics it is WRITE for TSQ.

**XCTL** – Connects programs and transfers control to the destination program.

**XMIT** – Transmit (shortened to XMIT for JES3 command syntax) is a mainframe



function that allows files and information to be sent from one location to another using the TCP/IP network.



### 2. Conversion Strategy

The following section describes the conversion strategy for the TRAC Application. The current process for loading data into SIS (SAWS Information System), the Pre-SAWS database, is analyzed and contrasted with the proposed strategy for loading data into the TRAC database. Finally, the two proposed alternatives that were developed during the Joint Application Design (JAD) sessions are discussed.

### **Current Application- Pre-SAWS**

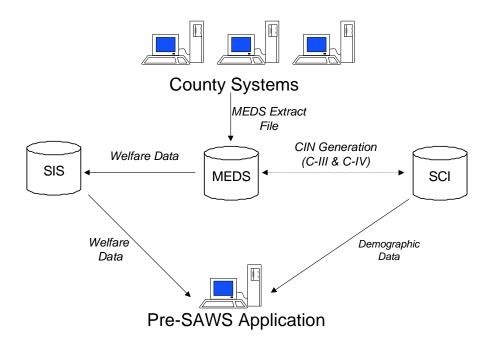
The current process begins when counties send an extraction file to MEDS containing all inserts and updates which occurred at the county systems over a specific period of time. If any of the records received by MEDS do not contain a Client Index Number (CIN), MEDS will interface with SCI to retrieve CINs for those records. After the counties extraction files are processed by MEDS, MEDS produces an extraction file that is sent to SIS containing a welfare related sub-set of the data sent by the counties. SIS processes the extraction file sent by MEDS and populates the database. After the data is loaded, the time clocks are calculated for each individual. Finally, before the data is displayed on the Pre-SAWS screens, the system interfaces with Statewide Client Index (SCI) to display demographic information such as the client's first and last name. The current system, however, is not meeting some of the requirements that are now demanded from the system:

- □ The data used to calculate the TANF-60 month, CalWORKs-60 month, and CalWORKs-18/24 month is not reliable because the data used by SIS to calculate the time clocks is not synchronized with the data in the county systems. Some data may be rejected through the MEDS process and never get sent to SIS.
- □ Data elements for some functional areas that affect the calculation of the welfare time clocks are not currently being captured by SIS, such as Diversion and Exceptions information.

The figure on the following page displays the flow of data into the current system.



Figure 1: Current Application



16



Last Updated: 7/31/2006

#### **TRAC**

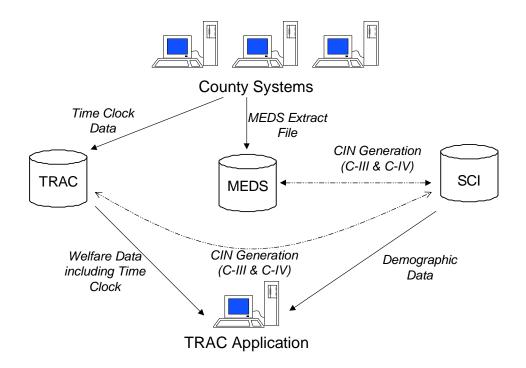
□ The objective of the TRAC Application is to capture mission critical data from source systems, namely county and consortia systems, and maintain the integrity of such data so that the data stored in its database is a replica of the data stored in the county and/or consortia systems. The TRAC Application will also collect additional data elements, which are not currently being captured by SIS such as Diversion information, and other data that is required to accurately calculate the CalWORKs 18/24-month, CalWORKs 60-month, and TANF 60-month time clocks.

The TRAC Application will still maintain its link with SCI through which it will obtain the demographic information about clients that is required for the screens display. Additionally, SCI will provide the TRAC Application directly with functionality to link an individual with a CIN (for counties that do not currently store CIN) as well as information on CINs that have been merged in SCI. This functionality is necessary to accurately reflect the information that SCI is providing to the counties and other State systems like MEDS.

The figure on the following page displays the flow of data into the TRAC Application.



Figure 2: TRAC Application





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### **Conversion Options**

For the initial conversion of SIS data into the TRAC Application, some of the existing SIS data will need to be modified to support the new calculation programs in the TRAC Application. One example of data that needs to be modified is the Participation Type Code that indicates if the individual is an adult or child. This value currently resides in the SIS database, but exists at an individual level. Since an individual can participate as a child in a case at one time in their life and as an adult at other times, the conversion programs need to determine the Participation Type Code for each program in which the individual participated. This determination is made by using a combination of other data, like Birth Date and Person Number.

Once the initial restructuring of the database has occurred, loading of county data can be initiated. The data that will be used by the TRAC Application will primarily be provided directly from the different county systems across the state. Currently, the data that exists in the SIS database, and that is used by the Pre-SAWS application, is obtained through an interface with MEDS. The initial conversion strategy of county data into the TRAC Application leverages the existing data in the TRAC Application and consists of three primary approaches. These three approaches have been labeled Option 1, Option 2 and Option 3. All three options try to address the complexity of converting data that is currently stored across multiple systems and formats into the TRAC database, and preserve the history of the existing SIS data that may not be available from the counties directly. The choice of option will be left to each county to decide.

#### Option 1

The first approach, Option 1, consists of populating data in the TRAC Application from the earliest start date that could be provided by the county, given that the earliest data is after 12/96. All data, which currently exists in Pre-SAWS (SIS database) from that point forward would be deleted from the SIS database and populated with the new data provided directly by the county. The data that exists prior to that point in time would remain in the future TRAC database (currently SIS) as it is currently found in SIS.

#### Option 2

The second approach, Option 2, consists of populating all data from the county systems back to 12/96 and deleting all county specific data on individuals. This option would be preferred for counties who can provide a complete history (back to 12/96) for individuals in their source systems because it would insure that at the time of conversion, the TRAC database would have a true replica of source system data.

#### Option 3

The third approach, Option 3, consists of populating all data in the TRAC Application from the county systems back to earliest data available by CIN and deleting all county specific data on individuals. All data, which currently exists in Pre-SAWS (SIS database) from that point forward would be deleted from the SIS database and populated with the new data provided directly by the county. This option would be preferred for counties who can



provide all data for individuals in their source systems as it would ensure that at the time of conversion, the TRAC database would have a true replica of source systems from the earliest date for which data is available by individual.



Last Updated: 7/31/2006

### 3. Application Overview

The objective of the *Application Overview* section is to provide a high level description of the Tracking Recipients Across California (TRAC) system, the components of the application, and how the components interrelate to provide applicant/recipient time clock related data. This overview will begin with a description of the TRAC Application addressing the following components:

- □ The TRAC database
- □ TRAC programs
- Data sources

The overview also provides a description of the following:

- ☐ How data will flow from external systems into the TRAC Application;
- □ How the database will be restructured;
- ☐ How initial/ongoing loads will populate the new database with data from the existing SIS database and MEDS;
- ☐ How common logic programs are used to provide functions used by multiple programs; and,
- □ How screens and reports will be generated and used by Eligibility Workers.

### **Application Components**

The TRAC Application is comprised of a DB2 relational database and four types of programs. The four types of programs are common logic, screens, reports, and initial/ongoing load programs. Additionally, TRAC receives data from four data sources that include the counties, MEDS, SCI, and the SIS database. The following is a description of the database, programs and data sources that make up the TRAC Application.

#### **TRAC Database**

□ *TRAC Database*: The database is a DB2 relational database that will reside on the B3PD DB2 subsystem of the HHSDC mainframe (see the **System Architecture Model - Section 6** for more details).

#### **TRAC Programs**

- □ Common Logic Programs: Database access is provided to the online transactions through a series of agent subroutines, common logic subroutines, and copybooks containing processing logic (Refer to the **Definitions and Acronyms** section of this document for a list of definitions). Batch programs may also use these programs for database access. All programs are written using COBOL and SQL.
- □ *Screen (CICS) Programs*: The function of the screen programs is to display data on the TRAC application. Online transaction capability will be implemented using custom



programs written using COBOL and CICS. The TRAC Application provides online data inquiry as well as limited online data update capability via CICS transactions. Either 3270 or 3270 emulation connections between counties and the HHSDC will provide users with access to the application. Data that can be updated via batch processing will not be updateable online in the TRAC Application. Data that can be updated online will include Diversion, non-California program participation, Supportive Services Only, and Child Support reimbursement information.

- □ *Report Programs*: Reporting will provide summary and detailed information from the system in formatted outputs. Reports will be generated through batch programs and transmitted electronically to the counties and CDSS for inspection and printing.
- □ *Initial/Ongoing Loads*: System data will be derived, in part, from county systems via batch processes. Counties will provide data in a common file format to support the initial conversion of their information into the system. This same common file format and transmission process will be used on a regular basis to update recipient data stored in the database.

#### **Data Sources**

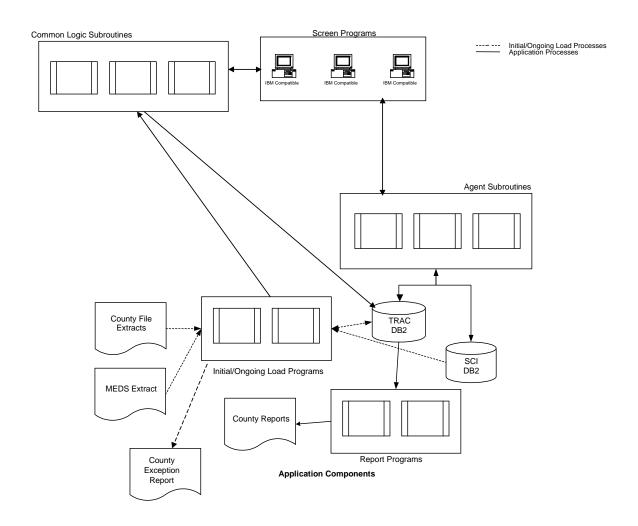
- □ County Extraction File: The application will interface with each of the county/consortia systems in the State of California. All counties will supply data to the batch load and conversion process; they will also have access to the online interface of the system.
- □ *MEDS Extract:* The application will interface with MEDS as the source of data for counties until they are converted and on an ongoing basis for non-time clock data elements.
- □ *SCI*: The application will interface with SCI for the generation and linking of CINs to records since some county systems do not retain this unique identifier.
- □ *SIS*: Data contained in the existing SIS will be converted to populate the TRAC Application database.

The TRAC Application components are depicted in the following graphic:



Figure 3: Application Components

### **Application Overview**

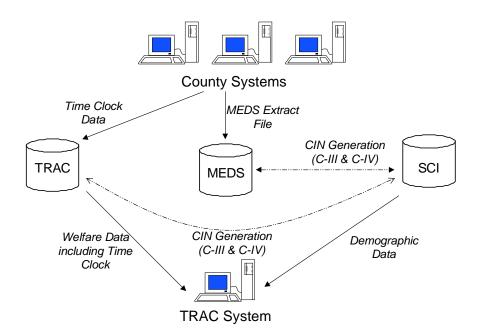




#### Infrastructure Overview

The TRAC Application is designed to accept all of the necessary time clock related data elements directly from the counties while relying on other statewide systems for some demographic data and other non-time clock related elements. These relationships are depicted in the following graphic.

Figure 4: Infrastructure Overview - TRAC Application



Time clock related data will be sent by each county in the standard extraction file format (described in the *External Developer's Guide* Attachment) to the TRAC Application. This file format will contain unique identifiers for each record that will be stored in the TRAC database and will link the information transferred to a specific individual. The CIN will be the key that TRAC will use to identify individuals. If a county system does not store CINs, the TRAC Application will send a batch file to the SCI database to identify the individual's CIN.

After the data has been loaded to the database, the TRAC Application will access programs that contain business rules associated with the calculation and display the data received. This common logic will also derive additional data elements that will subsequently be stored in the database.



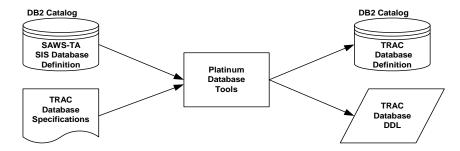
### Database Restructuring

Enhancements to the current SIS database will be made to accommodate storage of time clock related data and assist in program data processing. The resulting database will be the TRAC database. The tasks required to enhance the database include:

- □ Adding or deleting entire tables
- □ Adding or deleting columns in existing tables
- □ Formatting changes to current fields

Implementing database modifications requires database management tools (Platinum) to reside on the mainframe. These tools are described in the *Tools* section of the **System Architecture Model.** Change definitions and the current database structure will be incorporated within the database management tools. Combining the change definitions and the existing database will result in a new database structure definition. This process is depicted in the graphic below:

Figure 5: DB2 Database Change Process



The DB2 Database Change Process is described in further detail in the following items:

- □ SAWS-TA SIS Database Definition: DB2 databases are defined through a series of interrelated definition tables collectively referred to as the DB2 Catalog. Within the Catalog are the details of the table and column attributes and the relationships between tables. The physical storage characteristics of the database are also defined within the Catalog. Each DB2 subsystem has a unique Catalog defining all aspects of the tables and databases that reside on that system. This item defines the existing database structure of the SIS database as it resides on the B3PD subsystem.
- □ *TRAC Database Specifications:* The written specifications for the TRAC database are contained within the *Database Design* section of this document. These specifications will be combined with the current DB2 definitions to create the new database.
- □ Platinum Database Tools: The mainframe tools in this suite will read the DB2 Catalog and allow the database administrator to modify the detailed characteristics of the database. The tools provide a formatted panel interface for the construction and



modification of DB2 objects such as databases, tablespaces, tables, columns, and indexes. The tools produce a change language file that is then used to modify the DB2 Catalog.

- □ *TRAC Database Definition:* This item is the DB2 Catalog entries resulting from the changes defined in the TRAC Database Specifications. This item defines the new structure of the TRAC database as it resides on the B3PD subsystem.
- □ *TRAC Database DDL:* Data Definition Language (DDL) is the coded instructions that produce changes in the contents of the DB2 Catalog. A file of DDL can be used as a backup for the structure of the database. The structure of the database can be recreated from the instructions contained in this file.



### Initial/Ongoing Loads

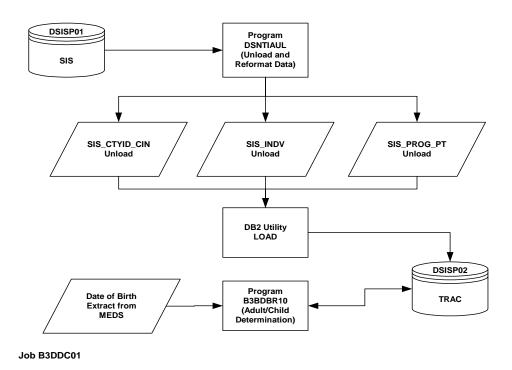
After the TRAC database is developed, the initial and ongoing data loads will serve to populate the new database. The steps required to load data include:

- □ Migrate data from SIS to TRAC
- Synchronize Data
- Load Data

### **Data migration from SIS to TRAC**

Data migration begins with the Unload and Reformat Data (DSNTIAUL) program to migrate data from SIS to TRAC. This program is a supplied DB2 program that will be modified for the task of reformatting. For this reason, the program does not conform to WDTIP naming conventions. Data from the SIS database will be unloaded and reformatted into the format of TRAC. The data will then be loaded into the new DB2 structures using data load utility programs. A program titled Adult/Child Determination Program (B3BDBR10) will then update the date of birth and participation type code information in the database. This process is depicted in the graphic below:

Figure 6: DB2 Data Conversion

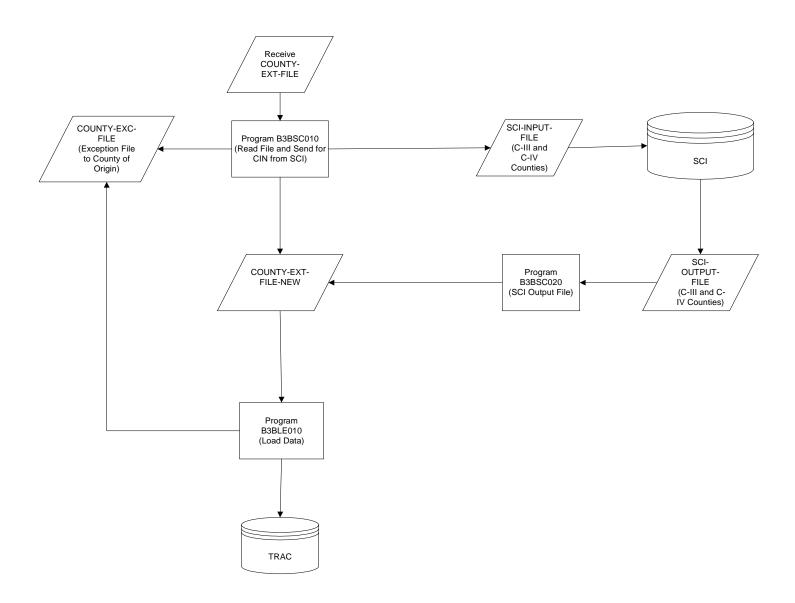




#### **Data Synchronization**

Once the existing data has been converted into the new format, that data must be synchronized with the data that comes directly from the counties. This will be initiated when each county transfers its respective extraction file (COUNTY-EXT-FILE) to TRAC. Only the specific data from the respective county will be updated. In other words, if the extraction file from Yuba County is received, only data that originated from Yuba County will be impacted. The process that the county data will follow is depicted in the following graphic:

Figure 7: County Job Flow: Job ID B3DDL01





After the COUNTY-EXT-FILE is received, a program will read the file and make a copy (COUNTY-EXT-FILE-NEW). This copy is made so that the integrity of the data is maintained in case any problems are incurred while the job is running. The name of this program is Create SCI Input File (B3BSC010). If the program encounters problems with the data in the Batch Header area of the COUNTY-EXT-FILE, a record will be added to the SIS\_EXCEPTION\_FILE table. Once the COUNTY-EXT-FILE-NEW has been created, the program determines if CINs are missing for each record. If a CIN is missing for a record, this program will search TRAC on the individual's county ID and attempt to see if that individual is known to the database. If the individual is found, the CIN is written into the copy of the extraction file. For any records that do not have CINs known to the database, a separate file will be created and sent to SCI. This file is titled SCI-INPUT-FILE. Although this file will be sent to an external system, this program is described in this section of the document because of its close dependency with the Initial/Ongoing Conversion Loads process.

SCI will use this file to link a CIN to a record or generate a new CIN through the SCI matching algorithm. This matching algorithm uses the individuals County ID, name, social security number, date of birth and gender to determine if the individual is known to SCI. A weighed scoring system is used to compare the incoming data with information in SCI and will then either associate an existing CIN with the record or generate a new CIN for the individual. SCI will attach the appropriate CIN to each record and send a file back to TRAC called SCI-OUTPUT-FILE. Once this file has been received, another program titled SCI Output File Program (B3BSC020) will attach these records to the COUNTY-EXT-FILE-NEW and send it on to be loaded to the database. In general, county data originating from a county that stores CINs in their respective eligibility system (e.g., ISAWS and LEADER) will not go through the matching process described in this paragraph.

Before the data is actually loaded to the TRAC database, the existing data provided from SIS will need to be synchronized with the new data. The factor that will determine how this process is completed will be identified by the conversion strategy option the county chooses to utilize. This option will be based on the accuracy and completeness of the data provided directly to the TRAC Application from each county. The conversion options include:

- □ Deleting all data that currently exists from the county (in the case that the county system has the capability to electronically provide that information directly).
- □ Deleting data after a point in time determined by the specific county (if the county can provide all data from that date forward for all its clients).
- □ Deleting data for each individual based on the earliest program participation effective date for that individual.

The programs that will read what option the county has chosen and synchronize the data are the Create SCI Input File (B3BSC010) if the county is using a single point in time, or the Extract Load Program (B3BLE010) if the county chooses to delete data based on a different date for each individual. This program will delete data based upon the information in the initial county extract received by TRAC. After this deletion process has taken place, a flag



will be set in the database to insure no further deletions will occur. This flag will be set after this program is run upon the initial load of data for each county.

#### **Load Database**

The program responsible for loading county data into the TRAC database is titled Extract File Load Program (B3BLE010). The first step in this program is to validate that all of the data sent by the counties (or generated by SCI) is complete and in valid format. If any of the data is not valid or is missing, the record will be written to the SIS\_EXCEPTION\_FILE table. Once B3BLE010 has run to completion, the County Exception File Program (B3BEX010) will create separate files for each county from all of the records on the SIS\_EXCEPTION\_FILE table. After that validation has occurred, the program will load data to tables in the TRAC database based on the specific transaction code provided by the counties. Each transaction will load data following a specific process. Please refer to the *External Developer's Guide's* Attachments for examples on how the data is loaded.

As data is loaded, internal flags will be set in the Individual Table (SIS\_INDV). These flags include indicators for:

- □ The existence of data in a table.
- □ Calculation of the time clocks for that specific day.
- □ Calculation of the time clocks at the end of the month.

After all of the appropriate data has been loaded, a record of the specific transaction will be added to a table in the database (BATCH\_TRX\_LOG). The information stored in this table will be a unique identifier for the county file, when it was received, how many records were included in the file, and how many records were processed.



#### State Data Sources

Apart from data received directly from the counties, the TRAC Application will interface with SCI and MEDS. SCI is referenced for the generation and linking of CINs to records for systems that do not store the CIN. MEDS will act as the source of data for counties until their data is converted and as the source of some non-time clock related data on an ongoing basis.

#### SCI

SCI will provide TRAC with information on CINs that have been merged in SCI. This merging process is necessary for individuals who may have had more than one CIN generated as a result of input errors or changes in their demographic data. When multiple CINs are identified, the counties notify SCI. SCI then links the CINs and assigns one as a "primary" and "freezes" the other(s). The TRAC Application utilizes the CIN Combination Update Program (B3BSC030) to update the TRAC database when a CIN merge occurs. B3BSC030 is depicted below in the graphic below.

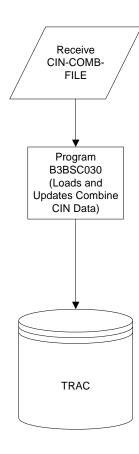


Figure 8: SCI Job Flow: Job ID B3DDL03



Last Updated: 7/31/2006

SCI sends a daily batch file (CIN-COMB-FILE) of merged CINs. B3BSC030 is initiated when CIN-COMB-FILE is received from SCI and checks if the merge is known to TRAC by referencing the SIS\_CIN\_COMBINATN table. If this record is known, the process will end. If there is a new merge, the program will add a record to the above table and then delete the record with the "frozen" or secondary CIN in the Individual table. The program will then delete information for the "frozen" CIN in the following other tables:

- □ Time Clocks (SIS\_TIME\_CLOCK, SIS\_CALWRKS\_18\_DTL, SIS\_CALWRKS\_60\_DTL, SIS\_TANF\_60\_DTL).
- □ Welfare to Work (SIS\_WTW).

Data is deleted for the frozen CIN(s) and the primary CIN will carry data for the individual's CINs.

The program will then update all of the associated tables in the database that store the "frozen" CIN. By updating these tables, all data for that individual will be included in the time calculation process run daily by TRAC. As records are updated through the B3BSC030 program, a reference will be added to the SIS\_CIN\_COMB\_AUDIT table. This table includes the new CIN and table name as well as the identifying information (CIN\_SECONDARY, SECONDARY\_CTY\_CD, TABLE\_NAME, and CREATED\_TS) for the previous CIN.

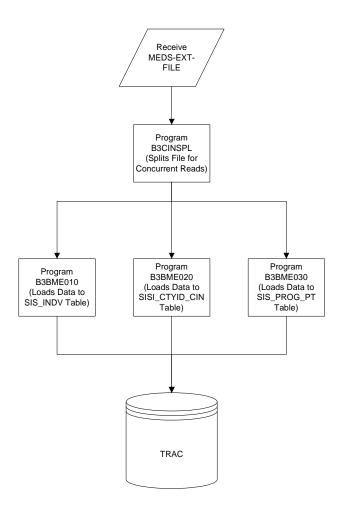
Apart from this program, the TRAC Application will interface with SCI for the matching and generation of CINs. The programs that complete those tasks (B3BSC010 and B3BSC020) are described in the *Initial/Ongoing Loads* subsection of this document.



#### **MEDS**

Four programs will be used to load the data from MEDS into the TRAC database. The graphic below depicts the relationship between these programs.

Figure 9: MEDS Job Flow: Job ID B3DDL02



The job flow is initiated when a file is received from MEDS (MEDS-EXT-FILE). A program titled B3CINSPL will break this file into components that can be run concurrently. Since this program is currently being utilized by the Pre-SAWS application, its specifications are not included in this deliverable. Once the data has been split, three programs load data to separate tables in the database. The program titled Updated SIS\_INDV Table Program (B3BME010) is a program that was modified from Pre-SAWS (hence, it does not conform to WDTIP naming conventions). This program populates data in the SIS\_INDV table. This



program updates rows that are currently in the database by searching for a unique CIN. If the CIN is found, it updates the record; if it is not found, it will insert a new record. The program titled Update SIS\_CTYID\_CIN Table Program (B3BME020) functions similarly on the SIS\_CTYID\_CIN table.

The program titled Update SIS\_PROG\_PT Table Program (B3BME030) loads data to the program participation table for counties that have not yet begun sending loads directly to the TRAC database. In addition to directly loading data, this program will populate some information that is not provided by MEDS, namely the Participant Type Code. This program will use the date of birth as well as person number and county to generate a value for the program participation record. This logic is based on the county of origin, person number (in most cases), and the individual's age. Once all of the counties are converted, this program will be discontinued.

It is important to note that both the complete MEDS Job Flow and the County Job Flow must be completed prior to the initiation of the SCI Job Flow (discussed in the *Initial/Ongoing Loads* subsection previously).



### Common Logic Programs

The TRAC Application incorporates common logic programs that are called by other programs within the system. The types of common logic programs are common logic subroutines, agent subroutines, and copybooks containing processing logic. Common logic subroutines provide functions such as time clock calculation and diversion calculation to other programs in the system. While agent subroutines are accessed by screen programs for data retrieval from the TRAC database and SCI. Copybooks that contain processing logic provide common functions such as error processing, help screens, and PF Key functionality.

### **Common Logic Subroutine - Time Calculation**

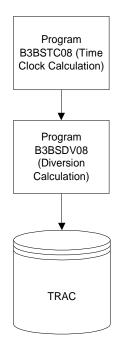
Once data has been loaded into the database and combined CINs have been updated, the TRAC Application will initiate the Time Calculation Process. This program is run daily and will calculate the time clocks for each individual whose record was updated since the last time the program was run. The program will then reference all of the appropriate tables in the database and generate values for the following tables:

- □ Time Clocks Summary (SIS\_TIME\_CLOCK)
- □ Welfare to Work 18/24-Month Clock (SIS\_CALWRKS\_18\_DTL)
- □ CalWORKs 60-Month Clock (SIS\_CALWRKS\_60\_DTL)
- □ TANF 60-Month Clock (SIS\_TANF\_60\_DTL)

This process also will be initiated for all individuals who have an open program participation record that impacts the time clocks. This program will be run on the first day of the month based on the monthly recalculation flag that resides in the SIS\_INDV table. This process is depicted in the graphic below.



Figure 10: Time Calculation Job Flow: Job ID B3DDL02

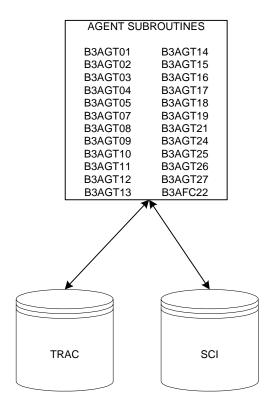




### **Agent Subroutines**

Agent subroutines retrieve data for display on screens. Agents process requests and retrieve data from appropriate tables in the TRAC database. Multiple screens may access the same tables for data and use the same agent for their data retrieval. This process is depicted in the following graphic.

Figure 11: Agent Data Retrieval

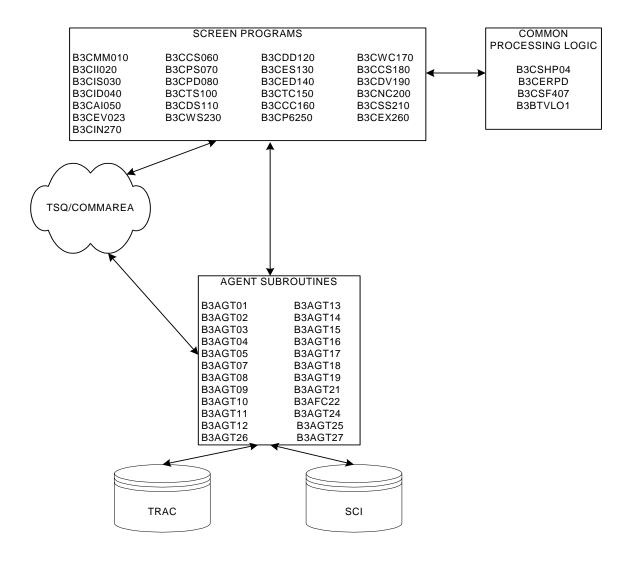




### Screens

Once the database has been populated, the TRAC Application will provide access to data through a series of screens. Data is displayed on screens using a screen/ agent method. In this method, screens are coded to display information, and agents perform data retrieval. This method is used to reduce redundant data retrieval logic for screens that display data from the same database tables. The screen/ agent method is depicted in the graphic below.

Figure 12: Screen Program Flow





Generally, the following process occurs when a screen is accessed:

- 1. All screen programs utilize an agent subroutine for data retrieval.
- 2. Agent subroutines then retrieve data from the TRAC database and SCI and populates a temporary storage area (COMMAREA or TSQ) depending on the requirement for the screen.
- 3. The screen then retrieves the data from the COMMAREA or TSQ for display.



## Reports

In addition to screens that provide access to data, the TRAC Application provides a series of reports to the counties and CDSS in electronic format. The users of the TRAC Application are provided with statewide, aggregate data that reflects the information contained in the counties' individual eligibility systems.

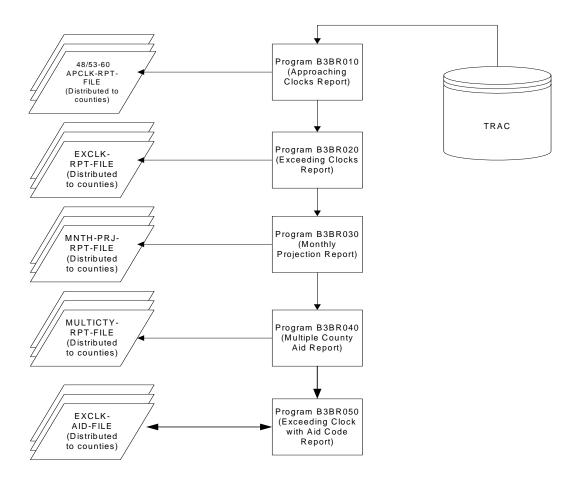
Once the monthly calculation of time clocks is complete, the following report files are generated.

- □ 48/53-60 Approaching Clocks Report This report file generates a summary (provided to CDSS) and detailed list (provided to the counties) of active individuals, by CIN or County ID, who are in one of the following months of the 60 month time limit for the CalWORKs and/or TANF Programs: 48, 53, 54, 55, 56, 57, 58, 59, or 60; and/or in month 15/21 of the 18/24 month time limit for WTW.
- □ Exceeding Clocks Report A summary (provided to CDSS) and detailed list (provided to the counties) of active individuals who have exceeded the 60-month time limit on the CalWORKs and/or TANF limits; and/or active individuals who have exceeded the 18/24-month WTW time limit.
- □ Exceeding Clocks Report with Aid Code A detailed list provided to the counties of active individuals, along with the aid code, who have exceeded the 60-month time limit on the CalWORKs and/or TANF limits. An individual may appear on the report multiple times as the individual was on multiple aid codes. This report excludes active individuals who have exceeded their TANF limit and are on either aid code 32 or 3W of the report month.
- □ Monthly Projections A report that provides a monthly projection of the number of active individuals who are in one of the following months of their CalWORKs and/or TANF 60-month time limits: month 54, 55, 56, 57, 58, 59; and/or the number of active individuals who are in one of the following months of their WTW 18/24 month time limit: month 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23.
- □ **Multiple County Aid** A report that contains the number of recipients who have received aid in more than one county over a lifetime of aid.
- □ Active Program Participation Report A report file that provides a detailed list of individuals with active program participation records in TRAC database. The definition of active program participation is determined by if the processing date (the date the report is run) is between the start and end date of any program participation.

The TRAC Application generates the report files each month containing the data for the above reports. The data for the reports will be consolidated into files which group similar data into each file to minimize the number of reports distributed each month. Report files for each of the 58 counties and summaries for CDSS are generated and stored for future access. The reports will be stored for twenty cycles in the production environment before being overwritten with new reports. This process is depicted in the following graphic.



Figure 13: Monthly Reports Job Flow: Job ID B3PMR01, B3PMR02, B3PMR03, B3PMR04, B3PMR05





## 5. Developer Notes

The following section lays out the components that external developers need to understand in order to develop programs that will interface with TRAC. The following topics are explained in detail in this section:

- □ Extraction File Layout
- □ Transmission Protocols
- □ Exception File Processing
- Reports Overview

### **Extraction File Overview**

The extraction file layout dictates the structure for the batch file that counties/consortia will send to the TRAC database in order to insert and/or update data in TRAC. The file layout is composed of the following four components:

- □ Batch Header
- Batch Trailer Record
- □ Record Header
- □ Transactions

As a general note, the extraction file should only contain transactions for which an insert or an update occurred in the county system. Counties should not send transactions to the TRAC Application unless there has been a change to the data being sent in the county system.

The remainder of this section focuses on describing each of the four components of the extraction file, focusing on areas such as exception handling and load scenarios. Refer to *Attachment A – Extraction File Layout*, for definitions of the data elements that make up each component of the extraction file, categorization of these data elements as mandatory or optional, and the ranges of acceptable values for each field.

#### Batch Header

The Batch Header marks the beginning of the extraction file and contains general identifying information about the batch file being received, such as the county and the day for which that file contains data. It is imperative that all extraction files sent to the TRAC Application begin with a Batch Header. For the Batch Header, the failure to meet any of the following two business rules would cause the rejection of the whole extraction file:

- 1. The Batch Header section is missing from the county extraction file.
- 2. Any of the mandatory fields included in the Batch Header are missing or contain a value that is not accepted by TRAC.



#### Batch Trailer Record

The Batch Trailer Record marks the end of the extraction file and, like the Batch Header, contains general information about the batch file being received. They are different in that the Batch Trailer Record includes an extra field, which displays the count of the total number of records that are contained in the file. All extraction files sent to the TRAC Application will need to end with a Batch Trailer Record. For the Batch Trailer Record, the failure to meet any of the following two business rules would cause the rejection of the whole extraction file:

- 1. The Batch Trailer Record section is missing from the county extraction file.
- 2. Any of the mandatory fields included in the Batch Trailer Record are missing or contain a value that is not accepted by TRAC.

#### Record Header

The Record Header contains information about the individual transactions that update the TRAC database. It contains individual identifying data such as the CIN, Case Serial Number, Case FBU MEDS Code, and Person Number. Including the Record Header in each transaction will allow the TRAC Application to process transactions independently since the CIN and the County Code (Case Serial Number, Case FBU MEDS Code, County ID and Person Number) will be stored in the TRAC database tables for linking records with transactions containing inserts/updates. Additionally, the Record Header, as well as the Batch Header and the Batch Trailer Record, contains identifying information about the extraction file received such as the County Code, Batch Number, and Transaction Version.

If the Record Header fails to meet the following business rules, the whole Record Header and the transaction contained in it will be rejected.

- 1. All transactions contained in the extraction files will need to start with a Record Header.
- 2. If the county's system utilizes the CIN as an individual's unique identifier, then CIN and Case Serial Number, at a minimum, will be considered as mandatory fields for that county. Additionally, the TRAC Application will be expecting as mandatory fields for that county any combination of Case FBU MEDS Code and Person Number that is used by a specific county, to uniquely identify an individual within the county. The rest of the fields that are not necessary to uniquely identify an individual within a county will be optional. The exclusion of optional fields in the Record Header will not result in the record being rejected.
- 3. If the county's system does not utilize the CIN as an individual's unique identifier then, all of the following values will be considered as mandatory, with the exception of SSN, for that specific county's Record Header. These are necessary to interface with SCI's matching algorithm in the CIN retrieval process.
  - Case Serial Number
  - □ Case FBU MEDS Code
  - □ Person Number
  - □ Last Name



- □ First Name
- Middle Name
- □ SSN
- □ Gender
- 4. If the county uses Aid Code to uniquely identify the record (for example, Ventura County), Aid Code should be included as a mandatory field; otherwise, counties should not include Aid Code in the Record Header.
- 5. If any of the required mandatory fields for a specific county contains data that does not meet the data validation rules the record will be rejected.

**Important Note:** The field Caseworker ID is an optional field that has been included in the extraction file layout (refer to *Attachment A- Extraction File Layout*) to tie exception records with caseworkers in a county. The field will not be stored in the TRAC database, and will only be used to append to the rejected rows contained in the exception file to assist counties with the data cleansing process. If the field is not provided, the record will not be returned. Because the field is optional and is not stored in the database, there will be no validation checking for acceptable values for this field; therefore, no records will be rejected based on the value provided for the Caseworker ID.



#### **Transactions**

Transactions represent the main mechanism used to load data from the county extraction file into TRAC. The TRAC Application will also load data through update screens; however, updates will be limited to those functional areas for which counties are not storing the data in an electronic format. Those functional areas where updates will be available through screens include:

- Diversion
- □ Non-California Participation
- □ Child Support Reimbursement
- Supportive Services

The extraction file should only contain transactions for which an insert or an update occurred in the county system. Counties should not send transactions to the TRAC Application unless there has been a change to the data being sent in the county system.

The rest of this section provides scenarios for the different transactions that will load data into the TRAC database. For each transaction, the following subsections will be included:

- □ Description: explaining the purpose of the transaction.
- □ Business logic: explaining the high level logic that is used to load each specific transaction into the TRAC database.
- □ Scenarios: showing examples of how different transactions load into the TRAC database.

In each example scenario, for the sake of simplicity, all of the mandatory data elements that are part of a transaction have not been included. Please refer to *Attachment A - Extraction File Layout* to identify the mandatory elements that **must** be included in each transaction.

**Important Note:** Although the value 'null' is included in the scenario examples, DB2 does not efficiently store 'null' values. When the TRAC Application is implemented, a value representing 'null' will be used (i.e., the value 99991231 could be used to represent end dates).

## Transaction Date of Birth Change

### Description

This transaction is designed to update data in the individual table (SIS\_INDV). The data contained within the record header of the transaction will be used to identify the record that is being updated. The DOB field will be updated using the date of birth sent in the Birth Date field of the extract file.

The business logic outlined below is applicable to all counties.



### **Business Logic**

- 1. All data that is added to this table by a county will only affect other data for that county. The county where the data originated will always be the "owner" of the data.
- 2. The CIN will be used as a **Key** to identify records in the database.
- 3. Through the use of the **Key**, this program will reference the CIN (provided by the county, or provided by SCI if the county is a non-CIN county) to identify the individual and update the data associated with individual in the database.
- 4. If the **Key** locates a row where the CIN contained in the transactions is equal to a row in the database, the Date of Birth contained in the transaction will replace the Birth Date in the database.
- 5. If the **Key** does not locate a row where the CIN contained in the transactions is equal to a row in the database, a new record will be inserted into the Individual Table.

#### **Scenarios**

The following scenario has been identified to demonstrate, at a high level, the logic used to update an individual's date of birth in the TRAC database. This section will use the Database Image Table to provide before and after images that show how each transaction impacted the TRAC database. The following scenario assumes that row #1, in the Database Image Table, already existed in the TRAC Application prior to receiving the transactions that are described in the following scenarios.

#### Scenario #1

This transaction will demonstrate how to update a record in the TRAC database. This scenario will be accomplished through the data contained in Transaction 1 in the Transactions Received Table. The following bullets detail the steps that the business logic follows in order to insert the new record into the TRAC database.

- □ The program will search for the *Key* following the logic described in Business Logic 4.
- □ A matching row is not found (Program Type Code was different in the *Key*). The program uses Business Logic 5 and inserts a new row into the database with a Program End Date equal to null.

#### **Transactions Received Table**

Data Elements	Transaction 1
CIN	123456789
Case Serial Number	1234567
FBU	1
Person Number	01
Date of Birth	19760607

#### **Database Before Image for Transaction 1**

Row #	CIN	DOB
1	123456789	19770607



#### **Database After Image for Transaction 1**

Row #	CIN	DOB			
1	123456789	19760607			

## Transaction TRAC-Program Participation

### Description

This transaction is designed to load data to the program participation table (SIS\_PROG\_PT) through the use of effective dates and status codes. These effective dates and status codes will build periods of eligibility for an individual with start and end dates that will be used by the program logic to do transaction operations such as inserting and updating records for an individual. The periods created by the transactions will then be used in the calculation of an individual's time clocks.

The business logic outlined below is applicable to all counties.

## **Business Logic**

- 1. All data that is added to this table by a county will only affect other data for that county. The county where the data originated will always be the "owner" of the data.
- 2. The County Code, Aid Code, Case Serial Number, FBU MEDS Code, Person Number, CIN, Program Type Code and Federal/State Only Indicator will be used as a **Key** to identify records in the database.
- 3. Through the use of the **Key** this program will reference the Program Effective Date and Program Status Code provided by the county to identify specific periods of eligibility and update the data associated with those periods in the database.
- 4. If the **Key**, Program Effective Date and Program Status Code locates a row where the Program Effective Date falls before the Program End Date, and the Program Status Code is equal to 'Aid', the Program Effective Date contained in the transaction will replace the Start Date in the database.
- 5. If the **Key**, Program Effective Date and Program Status Code locates a row where the Program Effective Date falls after the Program Start Date, and the Program Status Code is equal to 'Disc', the Program Effective Date contained in the transaction will replace the End Date in the database.
- 6. If the **Key**, Program Effective Date and Program Status Code do not locate a row where the Program Effective Date falls before the Program End Date, and the Program Status Code is equal to 'Aid', a new period will be inserted with a program end date defaulted to a value representing null.
- 7. The Program Status Code can end one period of eligibility (when Program Status Code equals 'Disc' and begin another (when Program Status Code equals 'Aid').
- 8. When the Program Effective Date is added as a Program Start Date, all the data (like Aid Code, Participant Type Code, Minor Parent Flag, etc.) associated with the Program Effective Date (from the county) will be added to the database in that same record. The one exception to this rule is Program Discontinuance Reason Code.



- 9. When the Program Effective Date is added as a Program End Date, the only associated field that is added to the row in the database is the Program Discontinuance Reason Code.
- 10. In some circumstances, the data that the county has sent may not be added because of the current condition of the data (i.e., a transaction with a Program Status Code of 'Disc' has been sent where an associated 'Aid' record does not exist). These instances will be included in the Exception File and sent back to the county.
- 11. Program Discontinuance Reason Code is an optional value, unless the transaction has a Program Status Code of 'Disc'.
- 12. Anytime the Program Status Code equals 'Aid', there should be no Program Discontinuance Reason Code populated in that record.
- 13. The Program Effective Month is an optional value that is used to synchronize cycle periods of eligibility with monthly periods of eligibility.
- 14. To correct a Program Start Date for a period that has a Program Start Date, a transaction must be sent with a Program Status Code of 'Aid', the correct Program Effective Date, and the **Key**. Since this Program Effective Date will populate the database as a Start Date, all of the associated field values (like Aid Code, Participant Type Code, Minor Parent Flag, etc.) must be included in that transaction.
- 15. In order to send a complete program participation period (with Program Start and Program End Dates) the county will need to send two separate transactions. The first transaction will set the Program Start Date (with all associated fields), and the second transaction will set the Program End Date (with the Program Discontinuance Reason Code).
- 16. Counties should not send any minor consent records to the TRAC Application.
- 17. When sending Aid Codes 3E, 3U, and 3H (3H effective 10/1/99) counties should send include a value in the optional field Federal/State Only Flag indicating the clock which the Aid Code will tick. Please refer to *Appendix 1-TRAC Reference Codes* for a list of valid values.

#### **Scenarios**

The following three scenarios have been identified to demonstrate, at a high level, the logic used to load program participation related data into the TRAC database. This section will use the Database Image Table to provide before and after images that show how each transaction impacted the TRAC database. The following scenarios assume that row #1, in the Database Image Table, already existed in the TRAC Application prior to receiving the transactions that are described in the following scenarios.

**Note:** The way the described scenarios impact the database can be followed in each scenario by comparing the before and after database images. Additionally, some data elements, like Participation Type Code and Minor Parent Flag, have not been included in the examples for the sake of simplicity.

#### Scenario #1

This transaction will demonstrate how to insert a new record into the TRAC database. This scenario will be accomplished through the data contained in Transaction 1 in the



Transactions Received Table. The following bullets detail the steps that the business logic follows in order to insert the new record into the TRAC database.

- □ The program will search for the *Key* following the logic described in Business Logic 3.
- □ A matching row is not found (Program Type Code was different in the *Key*). The program uses Business Logic 7 and inserts a new row into the database with a Program End Date equal to null.

#### **Transactions Received Table**

Transactions Received Table							
Data Elements	Transaction 1						
CIN	123456789						
Case Serial Number	1234567						
FBU	1						
Person Number	01						
County Code	05						
Program Effective Date	19980101						
Program Type Code	04						
Aid Code	3H						
Federal/State Only Indicator	N						
Program Status Code	Aid						

**Database Before Image for Transaction 1** 

Row #	CIN	Case #	FBU	Person Number	County Code	Aid Code	Program Type Code	Program Start Date	Program End Date
1	123456789	1234567	1	01	05	90	19	19980101	Null

**Database After Image for Transaction 1** 

Row #	CIN	Case #	<b>FBU</b>	Person Number	County Code	Aid Code	Program Type Code	Program Start Date	Program End Date
1	123456789	1234567	1	01	05	90	19	19980101	Null
2	123456789	1234567	1	01	05	3H	04	19980101	Null

**Note:** For 04/3H, a DISC transaction effective 19990930 should be sent to end date the period where the Federal/State Only indicator is not required. An AID transaction with the appropriate Federal/State Only indicator effective 19991001 should be sent to designate the appropriate funding source.

#### Scenario #2

This transaction will demonstrate how to change the Aid Code for an individual who is currently receiving aid under a different Aid Code. This scenario uses the data displayed in Transaction 2. The following bullets detail the steps that the business logic follows to process a transaction that changes the Aid Code.

- □ The program will search for a row using the *Key* and Business Logic 3, and finds that row #2 contains the same identifying information.
- □ The program then uses Business Logic 6, and inserts a new row (row #3).
- □ The program will set the overlap flag to Y, identifying that an overlap exists.



Last Updated: 7/31/2006

#### **Transactions Received Table**

Data Elements	Transaction 2
CIN	123456789
Case Serial Number	1234567
FBU	1
Person Number	01
County Code	05
Program Effective Date	19980301
Program Type	04
Aid Code	3R
Federal/State Only Indicator	N
Program Status Code	Aid

**Database Before Image for Transaction 2** 

Row #	CIN	Case #	FBU	Person Number	County Code	Aid Code	Program Type Code	Program Start Date	Program End Date
1	123456789	1234567	1	01	05	90	19	19980101	Null
2	123456789	1234567	1	01	05	3H	04	19980101	Null

**Database After Image for Transaction 2** 

Row #	CIN	Case #	FBU	Person Number	County Code	Aid Code	Program Type Code	Program Start Date	Program End Date
1	123456789	1234567	1	01	05	90	19	19980101	Null
2	123456789	1234567	1	01	05	3H	04	19980101	Null
3	123456789	1234567	1	01	05	3R	04	19980301	Null

### Scenario #3

This transaction will demonstrate how to terminate (end date) a program for a client who is receiving aid under a program for which the end date is not known (contains a null value).

- □ The program will follow the *Key* matching logic, Business Logic 3, and find a row that matches (row #3).
- □ The program then uses Business Logic 5, and because the record found contains a null Program End Date, and the Program Status Code for the data in Transaction 3 equals 'Disc', the Program End Date will be updated.

Data Elements	Transaction 3
CIN	123456789
Case Serial Number	7654321
FBU	1
Person Number	01
County Code	05
Program Effective Date	19980530
Program Type	04



Last Updated: 7/31/2006

Data Elements	Transaction 3
Aid Code	3R
Federal/State Only Indicator	N
Program Status Code	Disc

**Database Before Image for Transaction 3** 

Row #	CIN	Case #	FBU	Person Number	County Code	Aid Code	Program Type Code	Program Start Date	Program End Date
1	123456789	7654321	1	01	05	90	19	19980101	Null
2	123456789	7654321	1	01	05	3H	04	19980101	Null
3	123456789	7654321	1	01	05	3R	04	19980301	Null

**Database After Image for Transaction 3** 

Row	CIN	Case #	FBU	Person	County	Aid	Program	Program	Program		
#				Number	Code	Code	Type Code	Start Date	End Date		
1	123456789	7654321	1	01	05	90	19	19980101	Null		
2	123456789	7654321	1	01	05	3H	04	19980101	Null		
3	123456789	7654321			05	3R	04	19980301	19980530		

#### **OVRL**

In order to provide counties with the ability to identify individuals that have overlapping program participation data, an OVRL was created. The OVRL transaction is written to the exception file when an overlap has been identified for a recipient. The manner in which the overlap is identified uses simple logic where each record of program participation for a recipient is cross-checked against other records to see if any overlaps in instances of time exist. If an overlap exists for an individual a record will be written to the exception file identified by the OVRL TRAN ID. The layout, slightly different that the exception records, is as follows:

**Exception Record Detail** 

Field Name	Field Length	Data Type	Sample Data
Extraction File Transaction	175	A/N	OVRL9999999A1234567101
Reason Code	3	A/N	255
Reason Code Description	255	A/N	County data overlaps with County data for this Unique Identifier.

The first 4 bytes of the record contain the TRAN ID **OVRL**. The next 9 bytes identify the CIN, followed by the 7 byte case serial number, the 1 byte FBU Meds Code and the 2 byte Person Number. The OVRL TRAN ID is treated the same as a warning message and is intended to assist counties in identifying overlapping program participation records that may require further research/analysis.

Three exception reason codes have been created to designate whether the overlap exists between MEDS and County data (271), MEDS and MEDS data (272), or County and County data (255).



xception Reason Code 271 – County data overlaps with MEDS data for this unique identifier.							
County 01 (MEDS generated)    County 01 (County generated)							
The County Record would be written to the exception file as it created the overlap.							
Exception Reason Code 272 – MEDS data overlaps with MEDS data for this unique identifier.							
County 01 (MEDS generated)    County 01 (MEDS generated)							
The bottom MEDS Record would be written to the exception file as it created the overlap.							
Exception Reason Code 255 – County data overlaps with County data for this unique identifier.							
County 01 (County generated)    County 01 (County generated)							

The bottom County Record would be written to the exception file as it created the overlap.



## Transaction TRAC-Program Exceptions

### Description

This transaction is designed to load data to the Program Exceptions table (SIS\_PGM\_EXCPT). This transaction uses similar logic to the one used for loading program participation data. It will use effective dates and status codes to build periods of exceptions for an individual with start and end dates that will be used by the program logic to do transaction operations such as inserting and updating records for an individual. The periods created by the transactions will then be used in the calculation of an individual's time clocks.

## **Business Logic**

- 1. All data that is added to this table by a county will only affect other data for that county. The county where the data originated will always be the "owner" of the data.
- 2. The fields used to compose the **Key** used to identify records in the database will vary depending on whether the county that is sending the data is a county that can run multiple Program Exceptions concurrently for an individual. If the county can run multiple Program Exceptions concurrently, the CIN, Case Serial Number, Person Number, FBU MEDS Code, Aid Code, Program Exception Reason Code, and County Code will compose the **Key**. If the county cannot run multiple Program Exceptions concurrently, the CIN, Program Exception Code and County Code will be used as the **Key** to identify records in the database.
- 3. Through the use of the **Key** this program will reference the Program Exception Effective Date and Program Exception Status Code provided by the county to identify specific periods of eligibility, and update the data associated with those periods in the database.
- 4. If the **Key**, and the Program Exception Effective Date do not locate a row where the Program Effective Date falls before the Program Exception End Date, and the Program Exception Status Code equals 'Aid' a new period will be inserted and the end date for the new exception will be defaulted to a value representing null.
- 5. The Program Exception Status Code can end one period of eligibility (when Program Exception Status Code equals 'Disc') and begin another (when Program Exception Status Code equals 'Aid').
- 6. When the Program Exception Effective Date is added to the database as a Program Exception Start Date, all the other data received in the transaction will be added to the database in that same record.
- 7. When the Program Exception Effective Date is added as a Program Exception End Date, no other fields will be updated for the existing row.
- 8. The Program Exception Effective Month is an optional value that is used to synchronize cycle periods of eligibility with monthly periods of eligibility.
- 9. In some circumstances, the data that the county has sent may not be added because of the current condition of the data (i.e., a transaction with a Program Exception Status Code of 'Disc' has been sent with a Program Exception Date outside of all participation periods). These instances will be included in the Exception File sent back to the county.
- 10. To correct a Program Exception Start Date for a period, a complete record containing the correct Program Exception Effective Date, the **Key**, and a Program Exception Status



Code of 'Aid' needs to be sent. This Program Exception Effective Date will update the database as the new Program Exception Start Date.

- 11. To correct a Program Exception End Date for a period, a complete record containing the correct Program Exception Effective Date, the *Key*, and a Program Exception Status Code of 'Disc' needs to be sent. This Program Exception Effective Date will update the database as the new Program Exception End Date.
- 12. To delete an instance of an Exception for a period that has been sent because of an error, a transaction that contains the same Program Exception Effective Date, the *Key*, and a Program Exception Status Code of 'Disc' need to be sent.
- 13. In order to send a complete program exception period (with Program Exception Start and Program Exception End Date) the county will need to send two separate transactions. The first transaction will set the Program Exception Start Date (with all associated fields), and the second transaction will set the Program Exception End Date.

#### **Scenarios**

The following four scenarios have been identified to demonstrate, at a high level, the logic used to load exceptions related data into the TRAC database. All four scenarios assume that row #1, in the Database Image Table, already existed in the TRAC Application prior to the arrival of the transactions which are described in the following scenarios.

#### Scenario #1

This transaction will demonstrate how to insert a new record into the TRAC database. This scenario will be accomplished through the data contained in Transaction 1 in the Transactions Received Table. The following bullets detail the steps that the business logic follows in order to insert the new record into the TRAC database.

- □ The program will search for the *Key* following the logic described in Business Logic 2 and 3.
- □ The search results did not find a row (there were no existing rows that matched the **Key** in the database). The program uses Business Logic 4 and inserts the row into the database with a Program Exception End Date equal to null.

Data Elements	Transaction 1
CIN	987654321
Case Serial Number	1234567
FBU	1
Person Number	01
Aid Code	30
County Code	34
Program Exception Effective Date	19990101
Program Exception Code	03
Program Exception Reason Code	301
Program Exception Status Code	Aid



**Database Before Image for Transaction 1** 

Row #	CIN	Case #	<b>FBU</b>	Person Number	Last Updated Entity (stores the County Code)	U	Program Exception Reason Code	Program Exception Start Date	Program Exception End Date
1	987654321	1234567	1	01	34	03	300	19980101	19980430

**Database After Image for Transaction 1** 

Row #	CIN	Case #	FBU	Person Number	Last Updated Entity (stores the County		Program Exception Reason	Program Exception Start Date	Program Exception End Date			
					Code)		Code					
1	987654321	1234567	1	01	34	03	300	19980101	19980430			
2	987654321	1234567	1	01	34	03	301	19990101	Null			

#### Scenario #2

This transaction will demonstrate how to make a correction to the transaction processed in Scenario #1. For this scenario, two transactions will be needed, the first one will discontinue the existing one, and the second one will insert the correct data in the database. This scenario uses the data displayed in Transaction 2 and 3. For this scenario, both transactions were received in the same load. The following bullets detail the steps that the business logic follows to process a transaction that changes the aid code.

- □ The program will first execute Transaction 2. It will search for a row using the *Key* and Business Logic 3, and finds that row #2 contains the same identifying information. The program uses Business Logic 11 and makes the correction to the row, which ultimately triggers the deletion of the row.
- □ The program will then execute Transaction 3. Because a row is not found, it will use Business Logic 4 and insert the row into the database with a Program Exception End Date equal to null (row #3).

Data Elements	Transaction 2	Transaction
		3
CIN	987654321	987654321
Case Serial Number	1234567	1234567
FBU	1	1
Person Number	01	01
Aid Code	30	30
County Code	34	34
Program Exception Effective Date	19990101	19990101
Program Exception Code	03	03
Program Exception Reason Code	301	303
Program Exception Status Code	Disc	Aid



**Database Before Image for Transactions 2 and 3** 

Row #	CIN	Case #	FBU	Person Number	Last Updated Entity	Program Exception Code	Program Exception Reason Code	Program Exception Start Date	Program Exception End Date
1	987654321	1234567	1	01	34	03	300	19980101	19980430
2	987654321	1234567	1	01	34	03	301	19990101	Null

**Database After Image for Transaction 2** 

2000	ase raiter anna	50 101 1141							
Row #	CIN	Case #	FBU	Person Number	Last Updated Entity	Program Exception Code	Program Exception Reason Code	Program Exception Start Date	Program Exception End Date
1	987654321	1234567	1	01	34	03	300	19980101	19980430

**Database After Image for Transaction 3** 

Row #	CIN	Case #	FBU	Person Number	Last Updated Entity	Program Exception Code	Program Exception Reason Code	Program Exception Start Date	Program Exception End Date		
1	987654321	1234567	1	01	34	03	300	19980101	19980430		
3	987654321	1234567	1	01	34	03	303	19990101	Null		

### Scenario #3

This transaction will demonstrate how to change an end date for an exception.



Last Updated: 7/31/2006

- □ The program will follow the **Key** matching logic, Business Logic 3, and find a row that matches (row #3).
- □ The program then uses Business Logic 11, and because the row found contains a Program End Date, and the Program Exception Code for the data in Transaction 4 equals 'Disc', the Program Exception End Date will be updated.

#### **Transactions Received Table**

Transactions received rable	
Data Elements	Transaction 4
CIN	987654321
Case Serial Number	1234567
FBU	1
Person Number	01
Aid Code	30
County Code	34
Program Exception Effective Date	19990531
Program Exception Code	03
Program Exception Reason Code	303
Program Exception Status Code	Disc

**Database Before Image for Transaction 4** 

Row #	CIN	Case #	FBU	Person Number	Last Updated Entity	Program Exception Code	Program Exception Reason Code	Program Exception Start Date	Program Exception End Date
1	987654321	1234567	1	01	34	03	300	19980101	19980430
3	987654321	1234567	1	01	34	03	303	19990101	19990831

**Database After Image for Transaction 4** 

Duttur	tubuse their mage for trumsuction i										
Row #	CIN	Case #	<b>FBU</b>	Person Number	Last Updated Entity	Program Exception Code	Program Exception Reason Code	Program Exception Start Date	Program Exception End Date		
1	987654321	1234567	1	01	34	03	300	19980101	19980430		
3	987654321	1234567	1	01	34	03	303	19990101	19990531		



#### Transaction TRAC-Welfare to Work

### Description

This transaction is designed to load data to the Welfare to Work table (SIS\_WTW). This transaction will allow counties to update an individual's existing welfare to work information.

## **Business Logic**

- 1. All data that is added to this table by a county will only effect other data for that county. The county where the data originated will always be the "owner" of the data.
- 2. The CIN and the County Code (obtained from the Record Header) will be used as a **Key** to search for matching records in the database.
- 3. If a record is found in the database that matches the *Key* for the transaction received, the program will update the existing row with the new data that is received in the transaction. If a record is not found, the new row received will be added to the database.
- 4. If the CalWORKs Extension Number is not provided, it will be assigned a default value that equals '0'.
- 5. The CalWORKs Extension Number should only be sent when the CalWORKs 18 Month Indicator equals '18', for work plans dated prior to December 1, 2004. Valid values for CalWORKs Extension Number are '0-6', for work plans dated prior to December 1, 2004.

#### Scenarios

The following two scenarios have been identified to demonstrate, at a high level, the logic used to load welfare to work related data into the TRAC database. The data received for both scenarios (Transactions 1 and 2) will be displayed, as well as the before and after images of the database once the transactions have been processed.

#### Scenario #1

This transaction will demonstrate how to update an existing record into the TRAC database. This scenario will be accomplished through the data contained in Transaction 1 in the Transactions Received Table. The following bullets detail the steps that the business logic follows in order to insert the new record into the TRAC database.

- □ The program will use the *Key* using Business Logic 2 and 3.
- □ Because a record already existed in the database, the existing record will be updated with the new data received in Transaction 1.

Data Elements	Transaction 1
CIN	123456789
County Code	07
Workplan Sign Date	19980501
CalWORKs 18 Month Indicator	18
CalWORKs Extension Number	0



Last Updated: 7/31/2006

Data Elements	Transaction 1
WTW Status	AID

**Database Before Image for Transaction 1** 

Row #	CIN	Last Updated Entity (stores the County Code)	Workplan Sign Date	CalWORKs 18 Month Indicator	CalWORKs Extension Number
1	123456789	03	19980313	18	0
2	123456789	07	19980301	18	0

**Database After Image for Transaction 1** 

Row #	CIN	Last Updated Entity (stores the County Code)	Workplan Sign Date	CalWORKs 18 Month Indicator	CalWORKs Extension Number
1	123456789	03	19980313	18	0
2	123456789	07	19980501	18	0

### Scenario #2

This transaction will demonstrate how to insert a record for a client who up until the arrival of Transaction 2 was not in TRAC database. The following bullets detail the steps that the business logic follows in order to insert a new record into the TRAC database.

- □ The program will use the *Key* using Business Logic 2 and 3.
- □ Because no records were found, a new row of data is added to the table.

### **Transactions Received Table**

Data Elements	Transaction 2
CIN	111111111
County Code	07
Workplan Sign Date	19980701
CalWORKs 18 Month Indicator	18
CalWORKs Extension Number	0
WTW Status	Aid

**Database Before Image for Transaction 2** 

Row #	CIN	Last Updated Entity (stores the County Code)	Workplan Sign Date	CalWORKs 18 Month Indicator	CalWORKs Extension Number
1	123456789	03	19980313	18	0
2	123456789	07	19980501	18	0



**Database After Image for Transaction 2** 

Row #	CIN	Last Updated Entity (stores the County Code)	Workplan Sign Date	CalWORKs 18 Month Indicator	CalWORKs Extension Number
1	123456789	03	19980313	18	0
2	123456789	07	19980501	18	0
3	111111111	07	19980701	18	0



## Transaction TRAC-Non-California Months Participation

### Description

This transaction is designed to load data to the Non-California Participation table (SIS\_NONCAPT). This transaction uses similar logic to the one used for loading program participation data. It will use effective dates and status codes to build periods of participation for an individual with start and end dates that will be used by the program logic to do transaction operations such as inserting and updating records for an individual. The periods created by the transactions will then be used in the calculation of an individual's time clocks.

### **Business Logic**

- 1. All data that is added to this table by a county will only effect other data for that county. The county where the data originated will always be the "owner" of the data.
- 2. The CIN, Non-California State Code, and County Code (obtained from the Record Header) will be used as a **Key** to identify records in the database.
- 3. Through the use of the **Key** this program will reference the Non-California Participation Effective Date and Non-California Status Code provided by the county to identify specific periods of eligibility, and update the data associated with those periods in the database.
- 4. If the **Key** does not locate a row where the Non-California Participation Effective Date falls within the period of the Non-California Start Date and Non-California End Date, a new period will be inserted and the end date for the new program will be defaulted to a value representing null.
- 5. If the **Key** locates a row where the **Key** is the same, the Non-California end Date contains a value representing null, and the Non-California Status Code for the transaction record equals 'Aid'. The program will end the existing period of participation by subtracting a day from the Non-California Participation Effective Date received in the new transaction, and insert the new row with the Non-California Participation Effective Date as the new record's Non-California Start Date.
- 6. Based on the Non-California Status Code, the data can end one period of participation, when Non-California Status Code equals 'Disc', and begin another, when Non-California Status Code equals 'Aid' to indicate a change in Non-California Status Code.
- 7. When the Non-California Participation Effective Date is added as a Non-California Start Date, all the data associated with the Non-California Participation Effective Date (from the county) will be added to the database in that same record.
- 8. In some circumstances, the data that the county has sent may not be added because of the current condition of the data (i.e., a transaction with a Non-California Status Code of 'Disc' has been sent with a Non-California Participation Effective Date outside of all participation periods). These instances will be included in the Exception File sent back to the county.
- 9. To correct a Non-California Start Date for a period that has a Non-California Start Date, a transaction must be sent with a Non-California Status Code of 'Aid', the correct Non-California Participation Effective Date, and the *Key*. Since this Non-California Participation Effective Date will populate the database as a Non-California Start Date.



10. Counties must send a complete non-California program participation period (with Program Start and Program End Dates) consisting of two separate transactions. The first transaction will set the Non-California Start Date (with all associated fields), and the second transaction will set the Non-California End Date.

#### **Scenarios**

The following scenario has been identified to demonstrate, at a high level, the logic use to load Non-California program participation related data into the TRAC database. The following three scenarios assume that row #1, in the Database Image Table, already existed in the TRAC Application prior to the arrival of the transactions which are described in the following scenarios. For more examples of the process used to load Non-California Program Participation information, please refer to the scenarios in the Program Participation Transaction and Program Exception transactions subsections of the document, as the logic used to load data in these transactions is the same as the one used to load Non-California data.

#### Scenario #1

This transaction will demonstrate how to insert a new complete record (contains start and end periods) into the TRAC database. This scenario will be accomplished through the data contained in Transactions 1 and 2 in the Transactions Received Table. The following bullets detail the steps that the business logic follows in order to insert the new record into the TRAC database.

- □ The program will execute Transaction 1 and search for the *Key* following the logic described in Business Logic 3.
- □ Because the *Key* did not find a row that matched, the program uses Business Logic 4 and inserts the new row into the database with a Program End Date equal to null.
- □ The program will then execute Transaction 2 and search for the *Key* following the logic described in Business Logic 3.
- □ Because the *Key* found a row that matched, the program uses Business Logic 6 and inserts the new Program End Date. These two transactions have demonstrated how data needs to be sent in order to insert one full period of Non-California Program Participation.

Data Elements	Transaction 1	Transaction 2
CIN	111111111	111111111
Non-California State Code	MN	MN
County Code	01	01
Non-California Participation Effective Date	19980301	19980930
Non-California Status Code	Aid	Disc



**Database Before Image for Transaction 1** 

Row #	CIN	Non- California State Code	Non-Cal Start Date	Non-Cal End Date	Last Updated Entity (stores the County Code)
1	111111111	MN	19960101	19960130	01

**Database After Image for Transaction 1** 

Row #	CIN	Non- California State Code	Non-Cal Start Date	Non-Cal End Date	Last Updated Entity (stores the County Code)
1	111111111	MN	19960101	19960130	01
2	111111111	MN	19980301	Null	01

**Database After Image for Transaction 2** 

Row #	CIN	Non- California State Code	Non-Cal Start Date	Non-Cal End Date	Last Updated Entity (stores the County Code)
1	111111111	MN	19960101	19960130	01
2	111111111	MN	19980301	19980930	01



## Transaction TRAC-Diversion Program Participation

### Description

This transaction is designed to load data to the Diversion participation table (SIS\_PGM\_DIV). The business logic developed for this program is based on the concept of adding and deleting rows according to the Diversion Status Code that is received in the transaction. If the status code of the row received equals 'Aid' the row will be added or updated. To make corrections to the existing data (delete a Diversion Period), a transaction with a status code of 'Disc' will need to be sent.

### **Business Logic**

- 1. All data that is added to this table by a county will only effect other data for that county. The county where the data originated will always be the "owner" of the data.
- 2. The CIN, Diversion Payment Date, and County Code (obtained from the Record Header) will be used as a **Key** to identify records in the database.
- 3. The **Key** will be used to match records within the database. If the record does not match the **Key** the new data received in the transaction will be added as a new row.
- 4. If the **Key** finds a row in the database, and the Diversion Status Code of the new record equals 'Aid', the received row will update the existing row.
- 5. If the **Key** finds a row in the database, and the Diversion Status Code of the new record equals 'Disc', the existing row in the database will be physically deleted from the database.

### **Scenarios**

The following two scenarios have been identified to demonstrate, at a high level, the logic used to load Diversion Program Participation data into the TRAC database. The data received for the two scenarios (Transactions 1 and 2) will be displayed, as well as the before and after images of the database once the transactions have been processed.

**Note:** Multiple Diversion Payments within a month will only count as one month in the welfare time clocks, regardless of whether the Diversion Aid Code of those payments is different.

### Scenario #1

This transaction will demonstrate how to insert a month of Diversion only into the TRAC database. This scenario will be accomplished through the data contained in Transaction 1 in the Transactions Received Table. The following bullets detail the steps that the business logic follows in order to insert the new record into the TRAC database.

□ The program will search on the *Key* using Business Logic 3, because the row is not found, the new data received in Transaction 1 will be inserted as a new row in the table.



#### **Transactions Received Table**

Data Elements	Transaction 1
CIN	000000000
Payment Date	19980512
County Code	09
Diversion Status Code	Aid
Diversion Start Month	199805
Diversion End Month	199807

**Database Before Image for Transaction 1** 

Row #	CIN	Last Updated Entity (stores the County Code)	Diversion Payment Date	Diversion Start Month	Diversion End Month
1	000000000	03	19970501	199705	199707

**Database After Image for Transaction 1** 

Row #	CIN	Last Updated Entity (stores the County Code)	Diversion Payment Date	Diversion Start Month	Diversion End Month
1	000000000	03	19970501	199705	199707
2	000000000	09	19980512	199805	199807

### Scenario #2

This transaction will demonstrate how to make a correction for a Diversion Payment into the TRAC database for an individual. This scenario will be accomplished through the data contained in Transaction 2 in the Transactions Received Table. The following bullets detail the steps that the business logic follows in order to insert the new record into the TRAC database.

□ The program will search on the *Key* using Business Logic 5. Because a row is found, the program will look at the Diversion Status Code, and since the code received is a 'Disc' code, the existing database row that is matched will be deleted.

Data Elements	Transaction 2
CIN	000000000
Payment Date	19970501
County Code	03
Diversion Status Code	Disc



**Database Before Image for Transaction 2** 

	2 4440 480 2 41014 11146 401 11416 4041011 2					
Row #	CIN	Last Updated Entity (stores the County Code)	Diversion Payment Date	Diversion Start Month	Diversion End Month	
1	000000000	03	19970501	199705	199707	
2	000000000	09	19980512	199805	199807	

**Database After Image for Transaction 2** 

Row #	CIN	Last Updated Entity (stores the County Code)	Diversion Payment Date	Diversion Start Month	Diversion End Month
2	000000000	09	19980512	199805	199807



## Transaction TRAC-Supportive Services Only

### Description

This transaction is designed to load data to the Supportive Services Only table (SIS\_SUP\_SRV). The business logic developed for this program is based on the concept of adding and deleting individual instances of Supportive Services Only aid according to the Supportive Services Status Code that is received in the transaction. Because Supportive Services Only aid is granted for a period of one month, if the status code equals 'Aid' the row will be added. To make corrections to the existing data (delete a Supportive Services Period), a transaction with a status code of 'Disc' will need to be sent.

## **Business Logic**

- 1. All data that is added to this table by a county will only effect other data for that county. The county where the data originated will always be the "owner" of the data.
- 2. The CIN, Supportive Services Reason Code, Supportive Services Effective Month, and County Code (obtained from the Record Header) will be used as a *Key* to identify records in the database.
- 3. The **Key** will be used to match records within the database. If the record does not match the **Key**, the new data received in the transaction will be added as a new row.
- 4. If the **Key** finds a match in the database, and the Supportive Services Program Status Code of the new record equals 'Aid', the received row will update the record in the database.
- 5. If the **Key** finds a row in the database, and the Supportive Services Program Status Code of the new record equals 'Disc', the existing row in the database will be physically deleted from the database.

### **Scenarios**

The following three scenarios have been identified to demonstrate, at a high level, the logic used to load Supportive Services Only data into the TRAC database. The data received for the three scenarios (Transactions 1, 2, and 3), as well as the before and after images of the database will be displayed once the transactions have been processed.

#### Scenario #1

This transaction will demonstrate how to insert a month of Supportive Services Only into the TRAC database. This scenario will be accomplished through the data contained in Transaction 1 in the Transactions Received Table. The following bullets detail the steps that the business logic follows in order to insert the new record into the TRAC database.

□ The program will search on the *Key* using Business Logic 3. Because the row is not found, the new data received in Transaction 1 will be inserted as a new row in the table.

Data Elements	Transaction 1
CIN	22222222
Supportive Services Reason Code	01



Last Updated: 7/31/2006

Data Elements	Transaction 1
Supportive Services Effective Month	199907
County Code	09
Supportive Services Status Code	Aid

**Database Before Image for Transaction 1** 

Row #	CIN	Last Updated Entity (stores the County Code)	Supportive Services Reason Code	Supportive Services Effective Month
1	22222222	03	01	199905

**Database After Image for Transaction 1** 

Row #	CIN	Last Updated Entity (stores the County Code)	Supportive Services Reason Code	Supportive Services Effective Month
1	22222222	03	01	199905
2	22222222	09	01	199907

#### Scenario #2

This transaction will demonstrate how to insert a month of Supportive Services Only information into the TRAC database for an individual who already has had Supportive Services aid granted for that month. This scenario will be accomplished through the data contained in Transaction 2 in the Transactions Received Table. The following bullets detail the steps that the business logic follows in order to insert the new record into the TRAC database.

□ The program will search on the *Key* using Business Logic 3. Even though the individual is matched, the whole *Key* is not matched because the Supportive Service Program Type Code is different. Therefore, the new data received in Transaction 2 will be inserted as a new row in the table.

Data Elements	Transaction 2
CIN	22222222
Supportive Services Reason Code	03
Supportive Services Effective Month	199907
County Code	09
Supportive Services Status Code	Aid



**Database Before Image for Transaction 2** 

Row #	CIN	Last Updated Entity (stores the County Code)	Supportive Services Reason Code	Supportive Services Effective Month
1	22222222	03	01	199905
2	22222222	09	01	199907

**Database After Image for Transaction 2** 

Row #	CIN	Last Updated Entity (stores the County Code)	Supportive Services Reason Code	Supportive Services Effective Month
1	22222222	03	01	199905
2	22222222	09	01	199907
3	22222222	09	03	199907

### Scenario #3

This transaction will demonstrate how to make a correction for Supportive Services Only information into the TRAC database for an individual. This scenario will be accomplished through the data contained in Transaction 3 in the Transactions Received Table. The following bullets detail the steps that the business logic follows in order to insert the new record into the TRAC database.

□ The program will search on the *Key* using Business Logic 5. Because a row is found, the program will look at the Supportive Service Only Status Code, and since the code received is a 'Disc' code, the existing database row that is matched will be deleted.

#### **Transactions Received Table**

Data Elements	Transaction 3
CIN	22222222
Supportive Services Reason Code	01
Supportive Services Effective Month	199907
County Code	09
Supportive Services Status Code	Disc

**Database Before Image for Transaction 3** 

Row #	CIN	Last Updated Entity (stores the County Code)	Supportive Services Reason Code	Supportive Services Effective Month
1	22222222	03	01	199905
2	22222222	09	01	199907
3	22222222	09	03	199907



**Database After Image for Transaction 3** 

Row #	CIN	Last Updated Entity (stores the County Code)	Supportive Services Reason Code	Supportive Services Effective Month
1	22222222	03	01	199905
3	22222222	09	03	199907



Last Updated: 7/31/2006

## Transaction Child Support Reimbursement

### Description

This transaction is designed to load data to the Child Support Reimbursement table (SIS\_CHLD\_SUP\_REIMB). The business logic is based on the same concept as the one developed for Supportive Services Only. This program will add and delete individual instances of Child Support Reimbursement according to the Child Support Status Code that is received in the transaction. Because Child Support Reimbursement is granted for a period of one month, if the status code equals 'Aid' the row will be added. To make corrections to the existing data (delete a Child Support Effective Month), a transaction with a status code of 'Disc' will need to be sent.

### **Business Logic**

- 1. All data that is added to this table by a county will only effect other data for that county. The county where the data originated will always be the "owner" of the data.
- 2. The CIN, Child Support Effective Month, and County Code (obtained from the Record Header) will be used as a **Key** to identify records in the database.
- 3. The **Key** will be used to match records within the database. If the record does not match the **Key** the new data received in the transaction will be added as a new row
- 4. If the **Key** finds a row in the database, and the Child Support Status Code of the new record equals 'Aid', the received row will be rejected because the received row contains the same information as the row that exists in the database.
- 5. If the **Key** finds a row in the database, and the Child Support Status Code of the new record equals 'Disc', the existing row in the database will be physically deleted from the database.

#### **Scenarios**

The following two scenarios have been identified to demonstrate, at a high level, the logic used to load Supportive Services Only data into the TRAC database. The data received for two scenarios (Transactions 1 and 2), as well as the before and after images of the database will be displayed once the transactions have been processed.

#### Scenario #1

This transaction will demonstrate how to insert a month of Child Support Reimbursement into the TRAC database. This scenario will be accomplished through the data contained in Transaction 1 in the Transactions Received Table. The following bullets detail the steps that the business logic follows in order to insert the new record into the TRAC database.

□ The program will search on the *Key* using Business Logic 3. Because the row is not matched, the new data received in Transaction 1 will be inserted as a new row in the table.



#### **Transactions Received Table**

Data Elements	Transaction 1
CIN	33333333
Child Support Effective Month	199902
County Code	23
Child Support Reimbursement Status Code	Aid

**Database Before Image for Transaction 1** 

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Row #	CIN	Last Updated Entity (stores the County Code)	Child Support Effective Month		
1	333333333	05	199805		

**Database After Image for Transaction 1** 

Row #	CIN	Last Updated Entity (stores the County Code)	Child Support Effective Month
1	333333333	05	199805
2	333333333	23	199902

#### Scenario #2

This transaction will demonstrate how to make a correction for Child Support Reimbursement in the TRAC database for an individual. This scenario will be accomplished through the data contained in Transaction 2 in the Transactions Received Table. The following bullets detail the steps that the business logic follows in order to insert the new record into the TRAC database.

□ The program will search on the *Key* using Business Logic 5. Because a row is found, the program will look at the Child Support Reimbursement Code, and since the code received is a 'Disc' code, the existing database row that is matched will be deleted.

#### **Transactions Received Table**

Data Elements	Transaction 2
CIN	333333333
Child Support Effective Month	199805
County Code	05
Child Support Reimbursement Status Code	Disc

**Database Before Image for Transaction 2** 

Row #	CIN	Last Updated Entity (stores the County Code)	Child Support Effective Month
1	333333333	05	199805
2	333333333	23	199902

**Database After Image for Transaction 2** 

Row #	CIN	Last Updated Entity (stores the County Code)	Child Support Effective Month
2	333333333	23	199902



#### Transaction TRAC-Under 10 Grant

## Description

This transaction is designed to load data regarding Grants Under 10 dollars (i.e., zero basic grants) in the related TRAC database table (SIS\_UNDER10\_GRANT). The business logic is based on the same concept as the one developed for Supportive Services Only and Child Support Reimbursement. This program will add and delete individual instances of grant payments according to the Under 10 Grant Status Code that is received in the transaction. Because these type of grants are granted for a period of one month, if the status code equals 'Aid' the row will be added. To make corrections to the existing data (delete an Under 10 Grant), a transaction with a status code of 'Disc' will need to be sent.

### **Business Logic**

- 1. All data that is added to this table by a county will only effect other data for that county. The county where the data originated will always be the "owner" of the data.
- 2. The CIN, Under 10 Grant Effective Month, and County Code (obtained from the Record Header) will be used as a *Key* to identify records in the database.
- 3. The **Key** will be used to match records within the database. If the record does not match the **Key** the new data received in the transaction will be added as a new row.
- 4. If the **Key** finds a row in the database, and the Under 10 Grant Status Code of the new record equals 'Aid', the received row will be rejected because the received row contains the same information as the row that exists in the database.
- 5. If the **Key** finds a row in the database, and the Under 10 Grant Code of the new record equals 'Disc', the existing row in the database will be physically deleted from the database.

### **Scenarios**

The following two scenarios have been identified to demonstrate, at a high level, the logic used to load Grants Under 10 dollars data into the TRAC database. The data received for two scenarios (Transactions 1 and 2) will be displayed, as well as the before and after images of the database once the transactions have been processed.

#### Scenario #1

This transaction will demonstrate how to insert a month, in which the client received a payment of a grant that is under 10 dollars, into the TRAC database. This scenario will be accomplished through the data contained in Transaction 1 in the Transactions Received Table. The following bullets detail the steps that the business logic follows in order to insert the new record into the TRAC database.

□ The program will search on the **Key** using Business Logic 3, because the row is not matched, the new data received in Transaction 1 will be inserted as a new row in the table.



#### **Transactions Received Table**

Data Elements	Transaction 1
CIN	44444444
Under 10 Grant Effective Month	199902
County Code	23
Under 10 Grant Status Code	Aid

**Database Before Image for Transaction 1** 

2 WOWN WED 2 COLOT A LIMIT WOULD I				
Row #	CIN	Last Updated Entity (stores the County Code)	Under 10 Grant Effective Month	
1	44444444	27	199807	

**Database After Image for Transaction 1** 

Row #	CIN	Last Updated Entity (stores the County Code)	Under 10 Grant Effective Month
1	44444444	27	199807
2	44444444	23	199902

### Scenario #2

This transaction will demonstrate how to make a correction for a payment of a Grant that is under 10 dollars in the TRAC database. This scenario will be accomplished through the data contained in Transaction 2 in the Transactions Received Table. The following bullets detail the steps that the business logic follows in order to insert the new record into the TRAC database.

□ The program will search on the **Key** using Business Logic 5. Because a row is found, the program will look at the Under 10 Grant Status Code, and since the code received is a 'Disc' code, the existing database row that is matched will be deleted.

### **Transactions Received Table**

Data Elements	Transaction 2
CIN	44444444
Under 10 Grant Effective Month	199902
County Code	23
Under 10 Grant Status Code	Disc

**Database Before Image for Transaction 2** 

Row #	CIN	Last Updated Entity (stores the County Code)	Under 10 Grant Effective Month
1	44444444	27	199807
2	44444444	23	199902

**Database After Image for Transaction 2** 

Row #	CIN	Last Updated Entity (stores the County Code)	Under 10 Grant Effective Month
1	44444444	27	199807



### Transmission Protocols

Data transmissions between the counties and the TRAC Application will be based on the process currently in use for transmissions between the county and the MEDS application. The current data transmission process utilizes several functions of the mainframe-operating environment. Definitions for those functions are provided to assist in better understanding the rest of this section. The following terms will be used in this section:

**Internal Reader** - The internal reader (INTRDR) function accepts JES3 output data as an input job stream. Any job can use the internal reader to pass a job stream to JES3. The internal reader allows jobs submitted from MVS/TSO/E SUBMIT command and jobs created as system output (SYSOUT=(class, INTRDR)) to be submitted to JES3 input service for processing. JES3 dynamically starts internal readers as needed.

**JES** – The Job Entry System is a function within the operating system of mainframe computers that facilitates the execution of tasks, called JOBs, on the computer. The multiple versions of JES are JES2 and JES3. JES3 is in use at the HHSDC.

**TCP/IP** –Transmission Control Protocol/Internet Protocol (TCP/IP) is the basic communication language or protocol of the Internet. It can also be used as a communications protocol in the private networks called intranets and extranets.

**XMIT** – Transmit (shortened to XMIT for JES3 command syntax) is a mainframe function that allows files and information to be sent from one location to another using the TCP/IP network.

The current MEDS data file transmission uses the XMIT and Internal Reader facilities of the JES3 environment to send files of data between the county computing environment and the HHSDC computing systems. The following subsections will describe the process in further detail.

### **Data Transmissions from County to TRAC**

Data will be transmitted to the TRAC Application on a daily schedule. The file transfer process will include the following steps:

- □ *County Data Extraction File:* Data is extracted from the county database(s) and formatted into the extraction file layout described in the *Developer Notes* section of this document.
- □ File Transmission: The extraction file is input to a transmission function on the county computer system. This function contains the routing code for the HHSDC and the output file name for TRAC Application daily extraction. File names are defined by the TRAC Application and will be in the format B3.TRACnn.DAILY(+1). TRACnn will be changed to reflect the county number of the originating county, thus Sacramento would send a file named B3.TRAC34.DAILY(+1). The (+1) parameter refers to the creation of a new generation of a defined generation dataset group. Generation datasets will be defined by the TRAC Application to receive the county data.



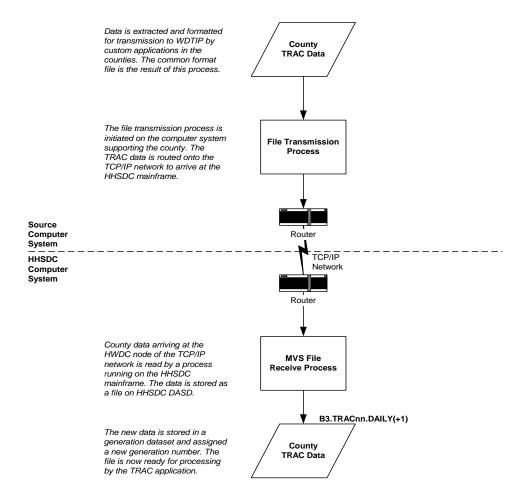
Last Updated: 7/31/2006

□ *File Reception:* Data arriving at the HHSDC node of the TCP/IP network will be read by a process running on the HHSDC mainframe. The data will be cataloged into the files named in the transmission data.

At the completion of these processes, the county data will be cataloged and stored on DASD associated with the HHSDC mainframe. At that time it will be available for processing by the application.

The following figure depicts these activities and shows the flow of data between the source systems and the HHSDC.

Figure 14: County to TRAC File Transfer



# **Data Transmissions from the TRAC Application to County**

Data will be transmitted to the counties on a scheduled basis. The file transfer process will include the following steps:



- □ The TRAC Application File Creation: Data resulting from TRAC's periodic processing will be stored in files on the HHSDC. These files may contain a variety of information such as reports or errors encountered in the processing of county data.
- □ *File Transmission:* The files are input to a transmission function on the HHSDC. This function contains the routing code for the county and the output file name(s). File names are defined by the receiving county.
- □ *File Reception:* Data arriving at the county node of the TCP/IP network will be read by a process running on the county computer. The data will be saved into the files named in the transmission data.

At the completion of these processes, the county data will be stored on media associated with the county computer. At that time it will be available for processing or review by the county.

## **Transmission Methods in Use by Counties**

Two methods of file transmission are in use. Counties with independent processing facilities may send their daily information directly to the HHSDC for processing by the MEDS application. Counties that are members of the ISAWS consortia have their data processed by the ISAWS data center. The following table shows the transmission protocol currently in use by each of the counties. The processes are described further in the items following the chart.

N	County umber and Name	Consortia	Independent Host to Host Transmission	Combined File Transmission
1	Alameda	C-III	X	
2	Alpine	C-I		X
3	Amador	C-I		X
4	Butte	C-I		X
5	Calaveras	C-I		X
6	Colusa	C-I		X
7	Contra Costa	C-III	X	
8	Del Norte	C-I		X
9	El Dorado	C-I		X
10	Fresno	C-III	X	
11	Glenn	C-I		X
12	Humboldt	C-I		X
13	Imperial	C-I		X
14	Inyo	C-I		X
15	Kern	C-I		X
16	Kings	C-I		X
17	Lake	C-I		X
18	Lassen	C-I		X
19	Los Angeles	C-II	X	
20	Madera	C-I		X



N	County Sumber and Name	Consortia	Independent Host to Host Transmission	Combined File Transmission
21	Marin	C-I		X
22	Mariposa	C-I		X
23	Mendocino	C-I		X
24	Merced	C-IV	X	
25	Modoc	C-I		X
26	Mono	C-I		X
27	Monterey	C-I		X
28	Napa	C-I		X
29	Nevada	C-I		X
30	Orange	C-III	X	
31	Placer	C-III	X	
32	Plumas	C-I		X
33	Riverside	C-IV	X	
34	Sacramento	C-III	X	
35	San Benito	C-I		X
36	San Bernardino	C-IV	X	
37	San Diego	C-III	X	
38	San Francisco	C-III	X	
39	San Joaquin	C-I		X
40	San Luis Obispo	C-III	X	
41	San Mateo	C-III	X	
42	Santa Barbara	C-III	X	
43	Santa Clara	C-III	X	
44	Santa Cruz	C-III	X	
45	Shasta	C-I		X
46	Sierra	C-I		X
47	Siskiyou	C-I		X
48	Solano	C-III	X	
49	Sonoma	C-III	X	
50	Stanislaus	C-IV	X	
51	Sutter	C-I		X
52	Tehama	C-I		X
53	Trinity	C-I		X
54	Tulare	C-III	X	
55	Tuolumne	C-I		X
56	Ventura	C-III	X	
57	Yolo	C-III	X	
58	Yuba	C-I		X

C-I ISAWS Consortia; C-II LEADER Consortia; C-III WCDS Consortia; C-IV C-IV Consortia



- □ Independent Host to Host Transmission: Data is input to a JES3 batch job that submits a transmit function to the internal reader. The XMIT function will execute and route to the JES queue of the HHSDC. County IT analysts may model the new send functions on the existing MEDS send function. Transmit and internal reader parameters will not need to be modified in order to create a TRAC Application send function.
- Combined File Transmission: The counties that are part of the ISAWS consortia do not perform a direct data transmission from their county computer system to the HHSDC. Data is sent from the computer supporting the ISAWS system to the HHSDC MEDS application on behalf of the member counties. The process currently in use invokes the File Transfer Processing (FTP) function to send a combined daily file to the Internet Protocol (IP) address of the HHSDC. The process is initiated on the UNISYS 2200 mainframe that supports the ISAWS consortium.

County IT analysts may model the new send functions on the existing MEDS send function. IP address parameters will not need to be modified in order to create a TRAC Application send function. New input and output file names and IBM site information will be required. The output file information will be supplied by the TRAC Application and will include record size, blocking, space, and retention period information.

79



# **Exception File Overview**

This section explains the exception handling process that will be implemented in the TRAC Application to ensure that received county data is correct and can be loaded into the database. This section also explains the Exception File Layout and provides scenarios explaining the usage of the Exception File.

### **Process Overview**

Exception handling will be a very critical process that will ensure that the data that passes the system data validation rules is loaded into the TRAC database. This process will be especially important in the TRAC Application because the majority of all inserts and updates to the database will be done through county extraction files sent on a daily basis. As each county's extraction file is processed, all of the data that fails to meet the validation requirements will be written to an exception file. The TRAC Application will reject data at two levels; file level and transaction level. The exception files generated will contain all of the rejected data for a specific county, as well as the reasons for rejection. Exception files will be sent on a daily basis to the system of origin so that the data can be corrected and resent to the TRAC Application.

### File Level Rejection

This type of rejection will occur when the data sent in the Batch Header and/or Batch Trailer Record of the Extraction File fails to meet the data validation criteria of the TRAC Application. If a file level rejection occurs, none of the data for the file will be processed. To correct a file level rejection, counties must resend the entire file with the correct Batch Header and Batch Trailer Record information. Also, to indicate that the file is being sent a second time, the Transaction Version field in the Batch Header, Batch Trailer Record and Record Header must be increased by one. If the file is sent more than once, the Transaction Version field must be sequentially incremented based on the number of times that the file has been sent.

## Transaction Level Rejection

This type of rejection will take place when any of the data sent as part of the Transaction data and/or the Record Header fails to meet the data validation criteria of the TRAC Application. If a Transaction level rejection occurs, none of the data contained in that Transaction will be processed. Once the data has been fixed, the correction Transaction can be included as part of another day's Extraction File. When a Transaction level rejection occurs due to bad or missing data being sent as part of the Record Header, all of the transactions for that specific header will be rejected. If the number of rejected rows is substantial, counties may choose to send all of the corrected rows as part of a different version of the previous extraction file. The correction file would need to include the same Header File information, with the exception of a Transaction Version that has been increased according to the version, and containing only the rows that need to be corrected.



#### **Data Correction Process**

Counties are responsible for processing Exception Files, correcting the rejected data, and sending the valid data to the TRAC Application. The exception handling process is critical to ensure that the application is loaded with valid data only; however, for the process to be effective, counties must take responsibility for the data that is sent in their extraction files. The data sent should be a replica of the transactions that took place at the county system for a specific day so that the TRAC database contains an image of that data. In order for the TRAC Application to accurately calculate the three welfare time clocks, counties need to actively participate in the data loading process. When exceptions have occurred and data correction is needed, counties must be prompt in fixing the data in their systems and sending the correct data to the TRAC Application to prevent a mismatch between both systems. Any mismatch could result in an inaccurate calculation of welfare time clocks.

## **Exception File Layout**

The exception file layout is designed similar to the extraction file provided by the counties, and has three major sections:

- Batch Header
- Batch Trailer Record
- □ Extraction File Transaction
- □ Exception Record Detail

#### Batch Header

The Batch Header contains information that identifies the exception report, and extraction file from which it was generated. The specific values that are contained in the Batch Header (and their associated description) include the following:

Field Name	Description
Transaction Code	Identifies the file as an exception file. The value "EXCP" should always
	populate this field.
Transaction Version	The version of the extraction file sent from the county. This field along with
	the Batch Number and County Code uniquely identify from which this file
	was generated.
County Code	Identifies the county of origin. It is used to uniquely identify from which
	this exception file was generated. A sample value for this field is 19 (for
	Los Angeles).
Batch Number	The sequential number generated by the county for the extraction file.

### Batch Trailer Record

The Batch Trailer Record contains the same information the Batch Header, except for the following fields:



Field Name	Description	
Transaction Code	Identifies the end of the file. The value "TRAL" should always	
	populate this field.	
Total Number of Records	The number of records that successfully updated into the TRAC	
Processed	database. If there was an error on the Batch Header information	
	from the extraction file, this value will be "0".	
Total Number of Records	The total number of records provided in the extraction file. This	
	field will directly be populated with the data in the Batch Trailer	
	Record in the extraction file.	

### Extraction File Transaction

The extraction file transaction will be the complete record where the error occurred in the Extraction file. Since each extraction file transaction has a slightly different layout (see *Attachment A- Extraction File Layout*), this section of the exception file will also have a different structure based on the original transaction. Directly following the extraction file transaction record will be details on why the specific records was excepted. This data will be populated in the exception record detail section of the extraction file.

## **Exception Record Detail**

The exception record detail contains a copy of the rejected transaction and the reason it was not processed. The Exception Record Detail contains the following values:

Field Name	Description	
Extraction File	This area will be the exact record rejected from the Extraction File sent	
Transaction	by the county. Since each transaction type in that file may have a	
	different length, the remained of this field will be filler.	
Reason Code	A three-digit code that describes the reason the record was rejected.	
Reason Code	A textual description of the Reason Code. This field gives a reason the	
Description	record was rejected in English.	

### **Exception File Scenarios**

In order to provide a clear understanding of the process by which data will be returned to the counties via the exception file, a few scenarios have been included in this document. These scenarios will describe the layout of the file and provide the reason/s data may be rejected by the load program. All of the exception file records described below will be found in the Extraction File Transaction and the Exception Record Detail of the exception file.

### Scenario A- File Level Information Rejection

San Bernardino sends a file that contains an invalid Account Code (it was a null value). Since this data element is mandatory and exists in the Batch Header and Batch Trailer Record, two records will be returned in the exception file.

#### **Batch Header**

Field	Data
Transaction Code	EXTR
Transaction Version	01



Field	Data
County Code	36
Account Code	(NULL)
Creation Date	20000724
Creation Time	120458
Batch Number	0012

### **Batch Trailer Record**

Field	Data
Transaction Code	TRAL
Transaction Version	01
County Code	36
Account Code	(NULL)
Creation Date	20000724
Creation Time	120458
Batch Number	0012
Total Number of Records	0000005045

The records sent to San Bernardino in the exception record detail will look similar to the table below (the heading has been changed for display in this document):

**Exception Detail Record** 

Exception Betain Record		
Extraction File Transaction	RSN	Reason Code Description
	Code	
(An exact copy of the record that was	103	Account Code is not a valid value or is
rejected from the Extraction File followed by		null.
filler space if necessary)		
(An exact copy of the record that was	113	Account Code is not a valid value or is
rejected from the Extraction File followed by		null.
filler space if necessary)		

## Scenario B - Record Header Information Missing

Kern County sends two transactions, Program Participation and Program Exception, for an individual that do not contain a value for Birth Date. The Birth Date is a mandatory element on the Record Header, so all records that are missing that element will be rejected from the loading process and included in the exception file. For the purpose of this example, the data in the record header would be duplicated, except for the specific Transaction Code for Program Exception (LD09).

**Record Header (Program Participation)** 

Field	Data
Transaction Code	LD02
Transaction Version	01
County Code	15
Creation Date	20000801



Field	Data
Creation Time	080446
Batch Number	0024
CIN ID	123456789
Case Serial Number	7654321
Case FBU MEDS Code	(Null)
Person Number	(Null)
Aid Code	(Null)
Last name	(Null)
First Name	(Null)
Middle Name	(Null)
SSN	(Null)
Birth Date	(Null)
Gender	(Null)
Caseworker ID	00000EW345

The other relevant data for this example is displayed in the tables below.

## **Program Participation Transaction**

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Field	Data	
Record Number	1199	
Program Type Code	01	
Aid Code	30	
Federal/State Only Indicator	N	
Program Effective Date	19991201	
Program Effective Month	(Null)	
Participation Type Code	A	
Minor Parent Flag	N	
Case Serial Number	7654321	
Case FBU MEDS Code	(Null)	
Person Number	(Null)	
Program Discontinuance Code	(Null)	
Program Status Code	Aid	

### **Program Exception Transaction**

Field	Data
Record Number	1204
Program Exception Code	03
Program Exception Reason Type	304
Code	
Program Exception Effective Date	20001201
Program Exception Effective Month	(Null)
Program Exception Status Code	Aid

Since the missing element appears in two different transactions in the extraction file, Kern will receive two different records for this data error. Since the Record Header information would be duplicated for each record in this scenario, it has been omitted.



Exception Detail Record

Extraction File Transaction	RSN	Reason Code Description
	Code	
(An exact copy of the record that was	135	Birth Date is not a valid value or is
rejected from the Extraction File followed by		null.
filler space if necessary)		
(An exact copy of the record that was	135	Birth Date is not a valid value or is
rejected from the Extraction File followed by		null.
filler space if necessary)		

In this case, a birth date would need to be added and then the records would be resent as a component of the next daily load (where the Batch Number would theoretically increment by one) or in a separate transaction which would include only data corrections from this original file (in which the Transaction Version Number would be incremented).

It is important to note that the entire record would be rejected for both the Program Participation Transaction and the Program Exception Transaction and none of the associated information for those transactions would be loaded into the TRAC Application.

## Scenario C - Field Level Information Missing

If data is passed to the TRAC Application that is invalid or a mandatory field is missing, the entire transaction will be rejected. For example, Orange County sends a transaction for an individual to update the Welfare to Work information for an individual.

#### Welfare to Work Transaction

Field	Data
Record Number	65
Workplan Sign Date	19990126
CalWORKs 18 Month Indicator	18
CalWORKs Extension Number	No

The valid values for the CalWORKs Extension Number are 0-6 for work plans dated prior to December 1, 2004; therefore, a "No" is invalid. For this reason the entire record would be rejected. Again the Record Header information is not displayed in this scenario and the Extraction File Transaction is represented by the Transaction Code for Welfare to Work Information (LD03).



Exception Detail Record

Extraction File Transaction	RSN	Reason Code Description
	Code	
(An exact copy of the record that was	172	CalWORKs Extension Number is not a
rejected from the Extraction File followed by		valid value or is null.
filler space if necessary)		

## Scenario D – Warning Messages for Data Loads

As discussed in the Extraction File Layout sub-section of this document, if two records are received with data that seems to be problematic but is not invalid, the TRAC Application will load the data and send a warning message back in the Extraction File. This can occur in three types of transactions:

- □ Program Participation
- □ Program Exceptions
- □ Non-California Program Participation

One example of this warning would be when a county sends a transaction that does not change any of the data for an existing record. For example, Los Angeles sends a Program Exception record to the TRAC Application that has the same Program Exception Code and Program Exception Reason Code as the previous record in the database. Additionally, the record in the database does not have an end date, and the new record has a Program Exception Status Code of "Aid" (meaning it is not designed to only end date the current record). Again, only the Transaction Code has been included in the example, but the actual file would contain the entire record including the Record Header and Transaction. Also, Los Angeles does not allow for concurrent program exception (in their source system) in this example.

**Program Exception Transaction** 

Field	Data
Record Number	20736
Program Exception Code	03
Program Exception Reason Code	304
Program Exception Effective Date	19990101
Program Exception Effective Month	(Null)
Program Exception Status Code	Aid

This is how the exception report will return a message to the county.

Exception Detail Record

Extraction File Transaction	RSN Code	Reason Code Description
(An exact copy of the record that was	288	Duplicate exception record. Record not
rejected from the Extraction File followed by		inserted
filler space if necessary)		



## Reports and Reports File Overview

This section describes the reports generated from the TRAC Application. Data for each report will be delivered in an electronic file format to the county's consortia. The consortium has the ability to use the files to create their own reports. These report files will be generated monthly and will report individuals who are within a predetermined time period of the specified time limit.

### 48/53-60 Approaching Clocks Report File

This system provides a report file that produces a summary (provided to CDSS) and detailed list (provided to the counties) of individuals who are in one of the following months of the 60-month time limit for the CalWORKs and/or TANF Programs: 48, 53, 54, 55, 56, 57, 58, 59, or 60; and/or in month 15/21 of the 18/24 month time limit for WTW. This report will be used by caseworkers as a caseload management tool to ensure that upcoming time on aid limits are recognized and appropriately controlled.

# Exceeding Clocks Report File without Aid Code and Exceeding Clock Report File with Aid Code

The system generates two types of exceeding clock reports:

- o A report file that produces a summary and detailed list of active individuals who have exceeded the TANF 60-month, CalWORKs 60-month, or WTW 18/24-month time on aid limits. This report is generated monthly and identifies individuals who have exceeded specified time limits. This report does not include the aid code.
- O A report file that produces a detailed list of active individuals, along with the aid code, who have exceeded the TANF 60-month or CalWORKs 60-month time on aid limits. An individual may appear on the report multiple times as the individual was on multiple aid codes. This report reflects the "aid code" for the report month. The report excludes client on aid code "32" or "3W" and has exceeded the TANF clock.

These exceeding clock reports can be used by caseworkers to ensure that individuals who have exceeded time on aid limits meet one or more time extender criteria or have their case handled as per applicable regulations. In addition, managers can also use the exceeding clock reports to help ensure that individuals who are no longer eligible to assistance due to expiration of time limits are appropriately notified and appropriate action taken.

## **Monthly Projections Report File**

The system produces a summary report file with counts of active individuals who are approaching the TANF 60-month, CalWORKs 60-month, or WTW 18/24 clocks, along with a "grand total" summary file that contains a copy of the individual 58 county summary records. This report includes TANF counts for those in months 54 through 59, CalWORKs counts for those in months 54 through 59, and WTW counts for the months 12 through 23...

County managers can use this report to project the number of individuals who may need to be discontinued from aid or transitioned to community service activities.



## **Multiple County Aid Report**

The system produces a report detailing the number of individuals who have received aid in multiple counties over time. This is a statewide aggregate report that will be generated monthly.

## **Active Program Participation Report**

The system produces a report file that contains a detailed list of individuals who has active program participation records in TRAC database. "Active" means the process date (the date the report is run) falls between the program participation start and end dates. This report excludes Food Stamp or Medi-CAL participation.

This report can be imported into the county system and compared against the county records to determine if there are individuals active on TRAC, but are inactive in the county system.

Refer to the specific report and report file layouts in the *Attachment* sections for report layouts.



# 6. Development Process

The cornerstone of the TRAC Application is data. Without accurate, complete, and timely data from the counties, the TRAC Application will fail to be a useful tool for eligibility workers across California. Given the criticality, the process of loading data from the counties into the TRAC Application is one of the most important steps in the development process. This process includes the following steps:

- □ Review of source system data
- □ Creation of extraction/loading programs
- □ Testing of extraction data
- □ Trial load
- □ Initial conversion
- Ongoing data extraction

Each step is described in the following pages.

# Review of Source System Data

The review of data directly from the eight systems that will provide the primary data for the TRAC Application is one of the first components of the development process. This step is designed to provide the WDTIP Team with an understanding of how data currently resides in the source systems. This process may identify some data integrity issues early on and/or confirm the programming approach assumptions that are critical to the development of both the extraction and load programs. For example, a county may be using the program end date field in their system to indicate a client's death by typing in the words "Death Date" in the date field. This additional text could be problematic for the load program to understand and cause error in testing later in the project.

The following are the necessary tasks and responsible parties for this step.

Task	Responsible Party
Provide sample data in ASCII text format from each source	ISAWS
system	WCDS
	LEADER
	Ventura
	Stanislaus
	Riverside
	Merced
	San Bernardino
Review data and make appropriate programming modifications	The WDTIP Team



Last Updated: 7/31/2006

# Creation of Extraction/ Loading Programs

The creation of the extraction and loading programs to transfer the data from the county systems to the TRAC database is the largest task in the development process. To meet this goal, each county/consortium will need to map data from its systems to a standard file format (see Standard File Format). This activity will include not only providing the data in a standard process (i.e., two transactions to provide a start and end date for a program) but also will need to convert any values in the county system into the values described in the Reference Codes section of this deliverable. Finally, the county/consortia will need to insure that only changes to the data elements requested by the WDTIP Team are sent in the daily files (as opposed to all records in the database). The level of effort involved in this activity should not be underestimated.

To assist the counties/consortia in this process, the WDTIP will provide a number of opportunities for testing of these files (and the program designed by the WDTIP to load the data). These testing files should contain a manageable number of records from each county to insure the data can be properly loaded and that after it is loaded, it is represented in the correct way to the counties. As the files are loaded, exception files will be sent to the counties describing any problems incurred. Additionally, the WDTIP Team will work with the extraction file creators to identify potential ways to improve the programming for this transfer. This program modification may focus on the creation of the extraction file or on the loading of the data. This is an iterative process. It may be necessary to complete this testing process multiple times for a county/consortia. The testing will continue until both the creator of the extraction file and the WDTIP Team are both satisfied that the data will be successfully loaded into the TRAC database.

The following are the necessary tasks and responsible parties for this step.

Task	Responsible Party
Design, develop and test (internally) extraction programs	ISAWS
	WCDS
	LEADER
	Ventura
	Stanislaus
	Riverside
	Merced
	San Bernardino
Develop and test data loading programs	The WDTIP Team
Send test extraction files (iterative until agree successful)	All counties
Send exception reports and programming modification	The WDTIP Team
suggestions (iterative)	

### Trial Loads

Once the testing is completed and both the counties and WDTIP are satisfied that the programs on both ends of the data transfer are working properly, a trial load will be

90



completed for each county's data. This trial load will be a complete data transfer from the source system. The purpose of this trial load is to give the counties a clear understanding of the effort necessary to modify the data loading into the TRAC database. It will also give the creator of the extraction file an understanding of the processing time required to extract the data. Once WDTIP has received this file, an exception file will be sent back to the originator of the data. This file can then be used as a guide to fix any remaining data/programming problems. For example, using the scenario from the *Review of Source System Data*, the "Death Date" text may be necessary to remove from the records in the database. This may require some manual fixes or programs to correct errant data.

The following are the necessary tasks and responsible parties for this step.

Task	Responsible Party
Generate trial load (in standard file format with initial load	All counties
records)	
Send exception reports and programming modification	The WDTIP Team
suggestions	

## **Initial Conversion**

Once all of the programming and data corrections have been made, the initial conversion of each county's data will begin. This step includes both the creation and transmission of the first extraction file (containing all of the historical data for an individual from each county) and the beginning of the daily updates that will be necessary from the source system. Again, after the file has been received, any records that cannot be loaded in the database will be noted in the exception report. From this point forward, it will be the responsibility of the county to correct data that is listed in the exception report.

The following are the necessary tasks and responsible parties for this step.

Task	Responsible Party
Generate initial conversion load	□ All counties
Send exception reports	☐ The WDTIP Team
Correct data and send back to the WDTIP	□ All counties



# Ongoing Loads (After Initial Conversion)

After the data for a county has been converted, a regular, daily update must to be sent to update the TRAC Application with new or modified data. These ongoing loads should only contain changes or additions to data that currently exists in the TRAC Application. For example, if an individual has an opened CalWORKs program, and the start date is contained in the initial load, it is not necessary to send that information again. Only when the individuals program is changed or closed should that program participation information be sent.

The following are the necessary tasks and responsible parties for this step.

Task	Responsible Party
Generate ongoing conversion load	□ All counties
Send exception reports	☐ The WDTIP Team
Correct data and send back to the WDTIP	□ All counties



# 7. WDTIP Technical Contacts

This section contains contact information for the WDTIP members who can be contacted to obtain further clarification on any of the topics that are covered in the External Developer's Guide. The contact information as well as the areas of expertise for the WDTIP Team members is contained in the following table.

Area of Expertise	Contact Name	Phone Number	E-mail Address
Screens and Reports/	Cecelia Brown	(916) 229-4412	cecelia.brown@osi.ca.gov
Conversion			-
System Technical	Kim Andregg	(916) 229-3380	kim.andregg@osi.ca.gov
Support (Database,			
Protocols, etc)			

For other questions regarding the WDTIP, please contact the WDTIP Help Desk at (877) 365-7378.

Note: the fax number for the WDTIP Team members is (916) 229-4487.



# 8. Issues and Assumptions

This section documents all of the issues and assumptions related to design. These assumptions were recorded during the Joint Application Design (JAD) sessions and during subsequent meetings.

### Issues

Some questions regarding the design of the TRAC Application were not completely resolved during the WDTIP Design Phase. To insure that these issues are not left unanswered during development, they have been listed in the following table.

Issue #	Description	
1	Confidential cases, such as a relative of an employee who is receiving aid in a	
	county, may need to be limited in access to statewide users. The impact of	
	this issue is being researched with the user community.	
2	The exact format and use of the Account Code data element has not been	
	determined. This value was originally designed for charge back purposes.	
	Further definition of this field will need to be provided to the county/consortia	
	developers if it is a required value from the county systems.	
3	An assumption (Assumption #25 below) has been made that case level aid	
	codes will not be received directly from the counties. However, CDSS is	
	researching the impact of case level aid codes on individual time clocks.	
4	The proposed loading logic for exemptions will not allow for concurrent	
	exemption periods. Counties may need the ability to have concurrent	
	exemption periods. Analysis is being completed to determine if it is	
	necessary, and how that functionality will impact the application design.	

# **Assumptions**

The assumptions will be used to guide the development process.

Assumption #	Description	Source
1	The data that originated in the county systems and loaded into MEDS has not been modified from its original form. MEDS sorts the data then sends it to systems with which it interfaces, such as SIS.	Design Process
2	An automated tool for conversion (e.g., ACL) will not be used since the mapping to the standard extraction file format will be completed by each county/system.	Design Process



Assumption #	Description	Source
3	The following is a description of the	Design Process
	MEDS processing procedures as they	
	are understood by the WDTIP:	
	1. County/Consortia sends MEDS	
	extract file.	
	2. MEDS rejects a whole record if	
	any of the data contain in the	
	MEDS extraction file does not	
	meet MEDS exception criteria.	
	3. MEDS sends a hard copy report	
	to the counties containing each	
	reject record.	
	4. Counties are responsible for	
	updating MEDS directly so that	
	both systems are synchronized.	
	5. At the end of a period (month or	
	quarter), the county/consortia	
	sends a snapshot of all the data	
	contained in their systems which	
	<ul><li>is required by MEDS.</li><li>6. MEDS matches the data from the</li></ul>	
	counties/consortia and produces a	
	reconciliation report for	
	unsynchronized data between MEDS and the county system.	
	7. Counties are responsible for	
	manually updating data on MEDS	
	that appears in the reconciliation	
	report.	
4	Counties have a very low number of	JAD Session
,	diversion program participation cases.	JAP Session
	Due to the low number of cases,	
	diversion information is recorded	
	through manual procedures that are	
	different from county to county.	
5	LA Legacy did not capture any data	JAD Session
	associated with diversion payments.	
	LEADER does not currently	
	(7/28/99) have any data loaded for	
	diversion payments. The diversion	
	information shall be captured in the	
	future and can be provided to TRAC.	
6	In Los Angeles, Welfare to Work	JAD Session
	Start Date is currently stored in	
	GEARS. In the future, LEADER has	
	a placeholder in their database for	
	storing that data.	



Assumption #	Description	Source
7	Non-California data will not be	JAD Session
	converted from LA Legacy to	
	LEADER (it did not exist in LA	
	Legacy). However, LEADER has the	
	capability to store this information.	
8	The JAD participants agreed that data	JAD Session
	not available from the county systems	
	(non-converted data) shall be	
	populated from data currently	
0	residing in SIS.	D : D
9	Data that is currently populated in SIS	Design Process
	does not contain complete	
	information to calculate the time	
	clocks. Specifically, exception,	
	diversion, supportive service, child support reimbursement and some	
	individual information is not stored in	
	SIS.	
10	All source systems need to provide	Design Process/ Meeting with DHS
10	either the CIN or all of the following	Design Frocess/ Weeting with DHS
	fields: County Code, County Serial	
	Number, FBU, Person Number, Last	
	Name, Middle Name, First Name,	
	SSN, Date of Birth and Gender. If	
	TRAC does not receive this data, the	
	entire individual's record shall not be	
	loaded into the database.	
11	Application programs that are	Design Process
	modified from the current Pre-SAWS	
	application shall continue to use the	
	same Program IDs and therefore, not	
	meet the program naming standards	
	outlined in the Design and Coding	
	Standards document.	
12	All jobs shall be named using the	Design Process
	Development Environment as the	
	target environment as it will be the	
	first environment in which the jobs	
	will be run.	
13	ABAWD data shall continue to be	WDTIP Project Management
	provided in the MEDS application.	verified by JAD participants
	Since this information will exist in	
	MEDS, the ABAWD data will not be	
	stored in the TRAC database.	



•		
Assumption #	Description	Source
14	If the counties do not send data for a period of days (due to the MEDS reconciliation process or other reasons), they shall either provide the daily updates that were missed in a single file or in a series of files	Design Process
	numbered sequentially.	
15	The counties shall continue to provide program participation information for all program types including CalWORKs, Food Stamps, Medi-Cal, Foster Care, etc.	WDTIP Project Management Decision
16	SCI will use a matching algorithm to link an individual to a CIN through demographic information. This algorithm is initiated by the program B3SC010 and returns the results through B3SC020.	Design Process
17	In the JAD sessions, the conversion workgroup participants modified an earlier assumption that Welfare to Work Start Date could not be reinitiated. The new assumption is that the counties would provide the Workplan Sign Date, and the most recent information received would be the date used to start the Welfare to Work 18/24-Month Time Clock.	JAD Session (this assumption redefines an older assumption from the Updated Business Requirements Document V04 [Assumption # 27 in this document])
18	In the JAD sessions, the application workgroup verified that a participant is active in a program when no program end date is present.	JAD Session (Application Workgroup)
19	Report information shall be distributed via electronic file.	JAD Session (Application Workgroup)
20	In the JAD sessions, the application workgroup agreed that each county's data processing center would link demographic and other data to report file information. Therefore, there is no need to send demographic information in the report file.	JAD Session (Application Workgroup)
21	The Multiple County Aid Report shall not be generated until all county systems are converted. This decision was later reversed, and currently WDTIP is generating this report for all converted counties.	JAD Session (Application Workgroup)



4: "		
Assumption #	Description	Source
23	Counties shall not send minor consent	Design Process
	program participation records to the	
	TRAC application.	
24	The TRAC application will only keep	JAD Sessions (Technical
	a single instance of a supportive	Workgroup)
	service only payment for an	
	individual in a county. If multiple	
	records are sent with a status of	
	"AID", the system will only display	
	one record. Additionally, to remove	
	that record, a county should only send	
	one record for that supportive service	
	only payment month with a status	
2.7	code of "DISC".	D 1 D (0 107.00.5)
25	Only individual aid codes should be	Design Process (from ACL 99-54)
	sent to TRAC. If the county source	
	system uses case level aid codes (i.e.,	
	"3E" after 10/1/1999), the county's	
	extraction file program should	
	translate that value into the	
26	appropriate individual aid code.	Hadata Dania and Dania and
20	The age eligibility parameters for	Updated Business Requirements Document V04
	CalWORKs will also apply to TANF with the exception of minor parents.	Document V04
	Minor parents are excluded from the	
	CalWORKs time clock requirements	
	but time is counted toward the TANF	
	time clock for minors who are heads-	
	of-households, or married to heads of	
	households.	
27	The 18/24-month clock does not start	Updated Business Requirements
	until the Welfare-to-Work plan is	Document V04
	signed (i.e., the Welfare-to-Work plan	
	initial sign date or the Welfare to	
	Work plan refuse to sign date).	
28	Each time clock has its own set of	Updated Business Requirements
	business rules.	Document V04
29	Receipt of supportive services only	Updated Business Requirements
	(no aid payment) counts as a month	Document V04
	toward the TANF 60-month clock	
	unless the recipient is employed.	
	Receipt of supportive services only	
	(no aid payment) does not count as a	
	month toward the CalWORKs 60-	
	month or 18/24-month clocks.	



Assumption #	Description	Source
30	The TANF start date is based upon	Updated Business Requirements
	the date of issuance of TANF funds in	Document V04
	California.	
31	With the exception of litigation, there	Updated Business Requirements
	is never an occasion where the 18/24-	Document V04
	month clock is reinitiated.	
32	The JRP workgroup expressed an	Updated Business Requirements
	interest in capturing and displaying	Document V04
	the reason code for diversion	
	payment. The item was determined to	
	be out of project scope and was	
	subsequently left out of the	
	requirement list. However, the JRP	
	workgroup would like to have it be	
	considered as a future enhancement to	
	the TRAC Application.	
33	Time clock tracking calculations for	Updated Business Requirements
	diversion payments are individually	Document V04
	based. When a diversion payment is	
	made, the appropriate clock will tick	
2.4	for each aided adult in the case.	**
34	WDTIP will not track Homeless	Updated Business Requirements
	Assistance payments for the Once-in-	Document V04
	a-Lifetime Homeless limitation, but	
	will instead track the effect of the	
	receipt of homeless benefits on the	
25	time clocks.	Undeted Duciness Descriptions
35	Security of the TRAC Application	Updated Business Requirements Document V04
	will be applied at the application level.	Document V04
36	The TRAC Application will track	Updated Business Requirements
30	ABAWD information even though	Document V04; Assumption #13
	the information is already present in	Document γοτ, Assumption π15
	the MEDS system. In addition, the	
	JRP workgroup expressed the desire	
	to minimize the impact of the creation	
	of the extraction files for ABAWD.	
	See Project Tracking System Issue#	
	17 for revision of assumption.	
37	The WDTIP Team will research to	Updated Business Requirements
	determine whether ABAWD	Document V04; Assumption #13
	information should be converted from	•
	MEDS to the TRAC database and	
	incorporate the solution into the	
	design of the TRAC Application. See	
	Project Tracking System Issue# 17 for	
	revision of assumption.	



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Assumption #	Description	Source
38	Data which can be modified through the county system's batch processes will not be updateable online in the TRAC Application. Details on which fields may be updated and the	Updated Business Requirements Document V04
	associated security issues will be determined during the Joint Application Design (JAD) sessions.	
39	The JRP workgroup expressed an interest in having, at a minimum, an indicator showing Statewide overissuance/overpayment information at an individual level and the county in which it was initiated. The item was determined to be out of project scope and was subsequently left out of the requirements' list. However, the JRP workgroup would like to have it be considered as a future enhancement to the TRAC Application.	Updated Business Requirements Document V04
40	The JRP workgroup expressed an interest in having the TRAC Application capture and display case participation data. It was determined that the TRAC Application will capture the county's case number and display it at an individual level. Capturing and displaying other additional fields as it relates to case participation at the case level was determined to be out project scope. However the JRP workgroup would like to have it be considered as a future enhancement to the TRAC Application.	Updated Business Requirements Document V04
41	The JRP workgroup concluded that it was not feasible to collect data on fleeing and drug felon applicants. The item was subsequently left out of the requirement list.	Updated Business Requirements Document V04



Assumption #	Description	Source
42	The WDTIP Team will work with	Updated Business Requirements
	Project Management, DHS and other	Document V04
	welfare consortiums to determine	
	whether the topic of data retrieval for	
	LEADER and ISAWS applications	
	during Statewide file clearance	
	(known-to-welfare search) is within	
	the scope of WDTIP.	
43	The JRP workgroup concluded that	Updated Business Requirements
	Job Retention Services was a local	Document V04
	issue and agreed to leave it out of the	
	requirements' list.	
44	WDTIP will evaluate any new state	Updated Business Requirements
	regulations up until the approval of	Document V04
	the Updated Business Requirements	
	Document for business requirements	
	and until August 31, 1999 for	
	technical requirements. Any new	
	legislation after the cut-off time will	
	be managed according to the Scope	
	and Change Control Process in the	
	Project Management Deliverable.	
45	WCDS and the C-IV counties do not	Updated Business Requirements
	use the CIN as a unique client	Document V04
	identifier in their legacy systems.	
46	The project will be developed, tested,	System Architecture Model V02
	and implemented on an OS/390	
	compatible mainframe computer.	
47	The computing systems of the Health	System Architecture Model V02
	and Human Services Data Center	
	(HHSDC) will be used to support the	
	development, testing, and	
	implementation of the application.	
48	The central database of the	System Architecture Model V02
	application will be implemented on	
	IBM's DB2 database platform.	
49	All database storage will be contained	System Architecture Model V02
	within the DB2 capacity of the	
	HHSDC. No distributed processing	
	incorporating the county databases	
	will be used.	
50	End users will gain access to the	System Architecture Model V02
	application database through CICS	
	transactions running on 3270 or 3270	
	emulation terminals.	



Assumption #	Description	Source
51	Deloitte Consulting shall have full	WDTIP Statement of Work, Section
	staff leadership and management	5
	responsibilities for the WDTIP and	
	will submit their recommendations to	
	the State WDTIP management staff	
	for approval.	
52	Deloitte Consulting will report	WDTIP Statement of Work, Section
	directly to the SAWS Deputy Director	5
	or his representative.	
53	The State will provide on a timely	WDTIP Statement of Work, Section
	basis, as defined by the project	5
	workplan, qualified State resources to	
	assist in the design, development and	
	implementation of the Welfare Data	
	Tracking Implementation Project	
	system. These resources are identified	
	in the project organization charts in	
	the IAPDU, Section 4.3.	
54	The State will provide timely	WDTIP Statement of Work, Section
	resolution, as defined by the project	5
	workplan, of State controlled issues	
	that affect the project plan and	
	schedule.	
55	The counties will provide adequate	WDTIP Statement of Work, Section
	resources to participate in	5
	Requirements Validation, Data	
	Conversion, Training, and	
	Implementation activities.	
56	Individual counties will be	WDTIP Statement of Work, Section
	responsible for conversion data	5
	mapping and extraction activities. In	
	addition, counties will provide	
	necessary test data to the project on a	
	timely basis. These activities will be	
	completed on time and in accordance	
	with the county's rollout date.	WIDTER G CWI 1 G .:
57	All data files provided by the counties	WDTIP Statement of Work, Section
	for conversion and on-going loads	5
50	will be Year 2000 compliant.	WIDTID Clatemant of Winds Co. C
58	User training will be conducted	WDTIP Statement of Work, Section
	utilizing the train-the-trainers	5
	approach. Some training may be	
	regionally based. Training will be	
	conducted at existing county or State	
	facilities. Deloitte Consulting will not	
	be responsible for providing any	
	training equipment.	



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Assumption #	Description	Source
59	The majority of system-generated reports will be handled under a separate project. Hence, there will be approximately 10 internal audit reports that the Welfare Data	WDTIP Statement of Work, Section 5
	Tracking Implementation Project must generate.	
60	An Advisory Committee will be formed including representatives from the California Department of Social Services (CDSS), the Department of Information Technology (DOIT); the Health and Human Services Data Center (HHSDC), the County Welfare Directors Association (CWDA), the Department of Health Services (DHS), the Welfare Data Tracking Implementation Project IV&V Vendor, and Deloitte Consulting.	WDTIP Statement of Work, Section 5
61	Although the State is planning for the Statewide Client Index (SCI) management and maintenance to be transferred from DHS to WDTIP sometime during the duration of the project, the SCI system and it's maintenance will be the sole responsibility of the State.	WDTIP Statement of Work, Section 5
62	The WDTIP Phase II schedule and deliverable due dates will be reviewed and revised, as appropriate, as a component of the Phase II Workplan deliverable. The WDTIP Phase III schedule and deliverable due dates will be reviewed and revised, as appropriate, as a component of the Phase III Workplan deliverable.	WDTIP Statement of Work, Section 5



Assumption #	Description	Source
63	The WDTIP user training delivered to	WDTIP Statement of Work, Section
	all of the California counties will be	6
	based upon the training of a selected	
	county trainer. User training will be	
	delivered by the Contractor to the	
	county trainers at regional sites using	
	existing county training facilities at no	
	cost to either the Contractor or the	
	State. Training will be delivered	
	through classroom instruction using	
	appropriate training materials to be	
	provided by the Contractor and	
	further defined in the implementation	
	strategy deliverable. Technical	
	support will be provided by the	
	Contractor to county technical	
	resources. The manner and duration	
	of the training will be determined	
	during the development of the	
	Training Strategy.	



		"SERVING CALIFORNIA"
Assumption #	Description	Source
64	Counties will provide resources in a timely manner, as defined by the project workplan, to assist in the following activities:	WDTIP Statement of Work, Section 6
	Requirements Validation (June/July/On-Going) Responsible for:  Initial Requirements Validation On-Going Requirements Validation	
	Implementation Coordinator (June/July/On-Going) Responsible for:  Implementation Schedule Primary County Contact Determine other County Contacts Communication within the County Change Leadership for County Business Processes User Acceptance Testing	
	Data Conversion (June/July/On-Going/Technical Person) Responsible for:  Defining what is Automated Defining what is Manual Data Mapping County Batch Program Development Testing and Trial Conversion County Acceptance Testing Initial Batch Load On-Going Load	
	Training (Time requirements adjacent to tasks) Responsible for:  Design of County Training Approach (July 99)  Review of Training Materials (Oct 99)  Scheduling (March 00/On-Going)  Receiving Training (March 00/On-Going)  Trainer for County (March 00/On-Going)	



Assumption #	Description	Source
Assumption #	The WDTIP Advisory Committee will	WDTIP Statement of Work, Section
05	meet on a regular basis to assist in	6
	reviewing project progress and aid in	Ŭ
	maintaining project scope and	
	progress.	
66	Since all funds were included in the	WDTIP Statement of Work, Section
	budget, the control agency review	6
	scheduled to occur upon completion	Ŭ
	of each of the three project phases,	
	will result in authorization to begin	
	the next phase of the project. The	
	control agency review process will	
	start early and not result in any lapse	
	between the identified project phases.	
67	The Contractor will be fully	WDTIP Statement of Work, Section
	responsible for maintaining	6
	appropriate staffing levels, providing	
	staff leadership and discharging staff	
	and project management	
	responsibilities.	
68	Designated key personnel will be on	WDTIP Statement of Work, Section
	site throughout the design,	6
	development, and implementation	
	phases of the WDTIP project, in	
	accordance with Section 9.1 of this	
	Agreement.	
69	The Contractor has the discretion to	WDTIP Statement of Work, Section
	hire consulting staff of their choice;	6
	however, they will attempt to use	
	those consultants with previous	
	SAWS-TA experience. Additionally,	
	resumes must be submitted and	
	approved by State management before	
	any consultant commences work on	
	the WDTIP.	
70	All required batch jobs will fit within	WDTIP Statement of Work, Section
	prescribed batch windows to be	6
	mutually determined during the	
	appropriate project phase.	
71	The database shall be converted to the	Design Process
	physical data model structure	
	described in this document prior to	
	the implementation of any of the	
	batch programs.	
72	Data shall be received on a daily basis	JAD Session (Technical Workgroup)
12	from the counties, MEDS, and SCI.	3712 Session (Teeninear Workgroup)
	from the counties, MEDS, and SCI.	



		SERVING CALIFORNIA
Assumption #	Description	Source
73	The following MEDS programs shall not be used after the database has been reconfigured to the physical data model structure described in this document: B3DU004, B3DU010, B3DU011, B3DU012, B3DU013, B3DU014, and B3DU017.	Design Process
74	No Batch Headers shall be provided for files interacting with SCI or MEDS (File names SCI-INPUT- FILE, SCI-OUTPUT-FILE, SCI- COMB-FILE, MEDS-EXT-FILE).	Design Process/ Meeting with DHS
75	The daily job flow shall be completed successfully prior to beginning the monthly job flow.	Design Process
76	Job B3DDL01 and B3DDL02 can be run concurrently, but B3DDL03 must not be run until B3DDL01 and B3DDL02 have been completed successfully.	Design Process
77	B3DDU01 must not be run until all other daily jobs have been completed.	Design Process
78	In the CIN-COMB-FILE provided by SCI, a Secondary CIN cannot be linked to more than one primary CIN. If this happens, the record shall not be processed in the database.	Design Process
79	All counties will send only individuals to TRAC in the extraction file. All payees, organizations, facilities, etc. shall need to be cleansed by the counties prior to sending the file.	Design Process/ Meeting with DHS (August 12, 1999)
80	Reports shall be generated in an e-file format.	JAD Session (Application Workgroup)
81	SCI will use a consistent matching algorithm so that regardless of the source of data sent for CIN generation (either MEDS or SIS), only one CIN shall be generated for an individual.	Design Process/ Meeting with DHS (August 12, 1999)
82	Counties are responsible for the design, development, and testing of their extraction files.	JAD Session (Technical Workgroup)



Assumption #	Description	Source
83	ABAWD was initially identified as a	Updated Business Requirements
	business requirement, but after further discussion and approval from CWDA it was decided to not change its existing functionality. See Project Tracking System Issue# 17.	Document V04; Assumption #13



# Attachment A - Extraction File Layout

### Introduction

The Extraction file is composed of different columns that qualify each of the fields in the extraction file. Below is an overview of each column.

- Mandatory/Optional: This column categorizes each of the fields in the extraction file into a mandatory or optional field. In some cases some fields are categorized as mandatory/optional. For further clarification for such fields please refer to the Rule column.
- Data Length: This column will display the length of the field in the extraction file.
- □ *Data Type:* This column will display the data type each of the fields in the extraction file. For example: A/N (Alpha Numeric), N (Numeric), and Date.
- □ *Definition:* This column will display the definition of each field. If the field is a TRAC database stored field, the definition provided will be the same as the one provided in the Data Dictionary section of the Developer Notes.
- □ *Rule:* This column will display additional information that is necessary to qualify each file in the extraction file. For each field one or more of the following components may be included under this column.
  - Rule: provides any additional validation rules that are special to a field. For example: The Program Discontinuance Reason Code is optional unless the Program Status Code is equal to 'Disc'.
  - Sample Data: provides a sample value of the data that could be contained in the field. For example: the field Batch Number could contain '0001' as a valid value.
  - Valid Value: provides the values that will need to be included for each field. If the field contains values that are found in a reference table, the name of the table and the column where the field is located will be provided. For example: the field County Code will be found under, WDTIP Reference codes (Table: County Code, Column: County Code). This field will also contain the valid format for the specific field such is the case for date and time type of fields.

In addition, the following rules should be observed with respect to file transmission:

- All records are of fixed length 150 bytes. If the record length is less than 150 bytes a filler should be inserted calculated as 150 bytes minus record length.
- The WDTIP system expects one extract file per county per day.
- The batch version number should start with 0 (zero).

The COBOL file layout is provided for reference.



# **Attachment B – Exception File Layout**

### Introduction

- □ *Data Length:* This column will display the length of the field.
- □ *Data Type:* This column will display the data type each of the fields. For example: A/N (Alpha Numeric), N (Numeric), and Date.
- □ *Definition:* This column will display the definition of each field.
- □ *Rule:* This column will display additional information that is necessary to qualify each file in the report file. For each field one or more of the following components may be included under this column.
  - Rule: provides any additional validation rules that are special to a field.
  - Sample Data: provides a sample value of the data that could be contained in the field.
  - Valid Value: provides the values that will need to be included for each field.



# Attachment C – Report Layout 48/53-60 Approaching Clocks

### Introduction

- □ *Data Length:* This column will display the length of the field.
- □ *Data Type:* This column will display the data type each of the fields. For example: A/N (Alpha Numeric), N (Numeric), and Date.
- □ *Definition:* This column will display the definition of each field.
- □ *Rule:* This column will display additional information that is necessary to qualify each file in the report file. For each field one or more of the following components may be included under this column.
  - Rule: provides any additional validation rules that are special to a field.
  - Sample Data: provides a sample value of the data that could be contained in the field.
  - Valid Value: provides the values that will need to be included for each field.



# **Attachment D – Report Layout Exceeding Clocks**

### Introduction

- Data Length: This column will display the length of the field.
- □ *Data Type:* This column will display the data type each of the fields. For example: A/N (Alpha Numeric), N (Numeric), and Date.
- □ *Definition:* This column will display the definition of each field.
- □ *Rule:* This column will display additional information that is necessary to qualify each file in the report file. For each field one or more of the following components may be included under this column.
  - Rule: provides any additional validation rules that are special to a field.
  - Sample Data: provides a sample value of the data that could be contained in the field.
  - Valid Value: provides the values that will need to be included for each field.



# Attachment D.1 – Report Layout Exceeding Clocks With Aid Code

### Introduction

- □ *Data Length:* This column will display the length of the field.
- □ *Data Type:* This column will display the data type each of the fields. For example: A/N (Alpha Numeric), N (Numeric), and Date.
- □ *Definition:* This column will display the definition of each field.
- □ *Rule:* This column will display additional information that is necessary to qualify each file in the report file. For each field one or more of the following components may be included under this column.
  - Rule: provides any additional validation rules that are special to a field.
  - Sample Data: provides a sample value of the data that could be contained in the field.
  - Valid Value: provides the values that will need to be included for each field.



# Attachment E - Report Layout Multiple County Aid

### Introduction

- □ *Data Length:* This column will display the length of the field.
- □ *Data Type:* This column will display the data type each of the fields. For example: A/N (Alpha Numeric), N (Numeric), and Date.
- Definition: This column will display the definition of each field.
- □ *Rule:* This column will display additional information that is necessary to qualify each file in the report file. For each field one or more of the following components may be included under this column.
  - Rule: provides any additional validation rules that are special to a field.
  - Sample Data: provides a sample value of the data that could be contained in the field.
  - Valid Value: provides the values that will need to be included for each field.



# Attachment F - Report Layout Monthly Projections

### Introduction

- □ *Data Length:* This column will display the length of the field.
- □ *Data Type:* This column will display the data type each of the fields. For example: A/N (Alpha Numeric), N (Numeric), and Date.
- □ *Definition:* This column will display the definition of each field.
- □ *Rule:* This column will display additional information that is necessary to qualify each file in the report file. For each field one or more of the following components may be included under this column.
  - Rule: provides any additional validation rules that are special to a field.
  - Sample Data: provides a sample value of the data that could be contained in the field.
  - Valid Value: provides the values that will need to be included for each field.



# Attachment G - TRAC Data Model

## Introduction

This attachment includes the physical data model of the TRAC Application. It provides the foundation for the table structure that will be implemented in the TRAC database. The physical data model is a graphical representation of all the tables in the TRAC Application with their corresponding columns and relationships.



# Attachment H – TRAC Data Dictionary

### Introduction

The data dictionary contains a complete listing of the tables and columns that make up the TRAC database. The following components are included in the data dictionary:

- □ Table Name
- □ Table Description
- Column Name
- Column Description
- Column Datatype
- □ Column Null Option (value = "Null" or "Not Null")
- □ Column Default Value (Note: In instances where the column default is system generated such as Current Date/Time, the value description in the data dictionary will be noted as "WITH DEFAULT". For character fields, the "WITH DEFAULT" designation will mean that the field can have a null value given that all DB2 fields, by convention are set to be "Not Null").



# **Attachment I – Report Layout Active Program Participation**

### Introduction

- □ Data Length: This column will display the length of the field.
- □ *Data Type:* This column will display the data type each of the fields. For example: A/N (Alpha Numeric), N (Numeric), and Date.
- □ *Definition:* This column will display the definition of each field.
- □ *Rule:* This column will display additional information that is necessary to qualify each file in the report file. For each field one or more of the following components may be included under this column.
  - Rule: provides any additional validation rules that are special to a field.
  - Sample Data: provides a sample value of the data that could be contained in the field.
  - Valid Value: provides the values that will need to be included for each field.



# **Appendix 1 – TRAC Reference Codes**

### Introduction

This section provides a description of the codes that will reside in the TRAC database application. The purpose for identifying these codes is to define a statewide standard for the codes that county systems will use to send data to the TRAC Application.

For each reference code, the information presented is divided into the following subsections:

- Business Description
- □ Business Need
- □ Information Sources
- Standard Values
- Comment